EPA Question	Response	Records/Information Available
Section 1.0 - Respondent Information		
1. Provide the full legal, registered name and mailing address of Respondent.	Portland General Electric Company 121 SW Salmon Street Portland, OR 97204	
2. For each person answering these questions on behalf of Respondent, provide:		
Site Operator: Portland General Electric		
a. full name;	Arya Behbehani-Divers	
b. title;	Manager, Environmental Services	
c. business address; and	121 SW Salmon Street m/s 3WTCBR05 Portland, OR 97204	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-464-8141 Electronic Mail Address: Arya.Behbehani-Divers@pgn.com Fax Number: 503-464-8527	
Site Consultant: URS Corporation		
a. full name;	Laura McWilliams, PhD, L.G. and Ashley Kaiser	
b. title;	Senior Geologist; Environmental Scientist	
c. business address: and	111 SW Columbia, Suite 1500 Portland, OR 97225-5850	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-222-7200 Electronic Mail Address: Laura Mcwilliams@urscorp.com; Ashley_Kaiser@urscorp.com Fax Number: 503-222-4292	
3. If Respondent wishes to designate an individual for all future correspondence concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number, and, if available, electronic mail address.	Arya Behbehani-Divers Portland General Electric Manager, Environmental Services 121 SW Salmon Street - 3WTCBR05 Portland, OR 97204 Tel: 503-464-8141 Fax: 503-464-8527 Electronic Mail Address: Arya.Behbehani-Divers@pgn.com	
Section 2.0 - Owner/Operator		

EPA Question	Response	Records/Information Available
Information	Portland General Electric (PGE) is preparing separate 104(e) responses for properties within the Investigation Area. This response addresses miscellaneous spills, the distribution network, and submerged cables within the Investigation Area. • The distribution network is the network of poles, power lines, vaults, underground cables, and pole-mounted/vault/pad-mounted transformers that provide electricity to PGE facilities and PGE customers (Q04_Components of Grid.pdf). See the attached figure (Q04_Dist. Network Transformers.pdf) for the approximate location of transformers in the Investigation Area. o Installed under various access agreements, the distribution network stretches across PGE properties (owned or leased), as well as properties not owned or operated by PGE. For this reason, this response is independent of any specific properties or addresses. o The attached figure (Q04_Dist. Network Transformers.pdf) shows the PGE-owned and operated transformers, as well as transformers that are PGE-owned but leased to PGE customers and transformers that are owned by PGE customers. Unless the Distribution Services Department is hired for a specific job, PGE does not provide maintenance or repair of leased or customer-owned transformers. • The miscellaneous spills addressed by this response occurred within the distribution network and outside of the PGE properties addressed by the other 104(e) responses (e.g., from vault/pad/pole-mounted transformers, from service vehicles, etc.). • The submerged cables are armored electrical cables that cross the Willamette River within the Investigation Area. See the attached figure (Q04_Dist. Network Transformers.pdf) for the approximate location of submerged cables in the Investigation Area.	
4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or historically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937 to Present). Please note that this question includes any aquatic lands owned or leased by Respondent.	PGE has many easements, rights-of-way, licenses, and/or permits for the distribution network.	Question 4 Attachments Q04_Components of Grid.pdf Q04_Dist. Network Transformers.pdf Also see Question 21 Attachment Q21a_PGE Owned & Operated Transformer Table.pdf
a. Currently Owns b. Currently Leases c. Currently Operates d. Currently otherwise affiliated with	Not applicable. This response is independent of any specific properties. Properties that PGE currently owns, leases, or is otherwise affiliated with within the Investigation Area are addressed in separate property-specific 104(e) responses.	
e. Historically Has Owned f. Historically Has Leased g. Historically Has Operated h. Historically otherwise affiliated with	Not applicable. This response is independent of any specific properties. Properties that PGE historically owned, leased, or was otherwise affiliated with within the Investigation Area are addressed in separate property-specific 104(e) responses.	

EPA Question	Response	Records/Information Available
5. Provide a brief summary of Respondent's relationship to each Property listed in response to Question 4 above, including the address, Multnomah County Alternative Tax lot Identification number(s), dates of acquisition, period of ownership, lease, operation, or affiliation, and a brief overview of Respondent's activities at the Properties identified.		
a. Relationship		
b. Address		
c. Multnomah County Alternative Tax ID #	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
d. Date Acquired (leased)		
e. Period of Lease		
f. Period of Ownership, Lease or Operation		
g. Activities	Distribution Network: Activities related to the distribution network include: installation and maintenance of poles, lines, vaults, underground cables, and transformers; spill response; periodic removal of water accumulated in vaults; and replacement or removal of the poles, lines, vaults, underground cables, and transformers as needed. Submerged Cables: Activities related to the submerged cables include installation and repair of the cables. The cables do not require periodic inspections or maintenance. Once laid, PGE conducts no activities related to the cables unless malfunctions occur.	
6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property,		

EPA Question	Response	Records/Information Available
including:		
a. partners or joint ventures;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
b. any contractor, subcontractor, or licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);	To the best of PGE's knowledge, after reasonable inquiry, only National Response Corporation (NRC) Environmental Services, Pacific Powervac, and Metro-Rooter & Plumbing Services (MRP Services) have assisted with clean up efforts along the distribution network. Periodic treatment of wood utility poles has been performed by Davie Tree Experts since 1997. Wood pole treatment activities are discussed in the response to Question 33. To the best of PGE's knowledge, after reasonable inquiry, no consultants or subcontractors have exercised control over any materials handling, storage, or disposal activities with regard to the submerged cables.	
c. any person subleasing land, equipment or space on the Property;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
d. utilities, pipelines, railroads and any other person with activities and/or easements regarding the Property;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
e. major financiers and lenders;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
f. any person who exercised actual control over any activities or operations on the Property;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses. Except for the purpose of power transmission, PGE does not have and has not had a proprietary interest in the non-PGE properties through which the distribution network or submerged cables traverse. For this reason, PGE does not have and did not exercise control over activities on the non-PGE properties.	
g. any person who held significant authority to control any activities or operations on the Property;	PGE maintains the electrical lines, underground cables, transformers, most of the poles, and some street lighting along the distribution network, except those transformers that are leased or customer-owned (unless the Distribution Services Department is hired for a specific job to provide maintenance). Multiple individuals have had authority within PGE to access and conduct activities along the distribution network and relating to the submerged cables. Many are listed on the following documents: • Bullseye articles 1956, 1957, 1958, 1959, 1960, 1961, 1963, 1967, 1971, 1973 and 1980. • Organizational charts for the years: 1980, 1982, 1984, 1986, 1988, 1989, 1990, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, and 2005 • Distribution and System Planning information. • Management structure information 1982-2007 In addition, the contractors identified in response to Question 6b have assisted with cleanup efforts along the distribution network or periodically treated the wood utility poles.	Question 6 Attachments Q06g_Bullseye articles.pdf Q06g_Organizational Charts.pdf Q06g_Distribution and System Planning Information.pdf Q06g_HRIC Structure Report 2008.pdf Q06g_HRIS Structure Info 1982-2007.pdf
h. any person who had a significant presence or who conducted significant activities at the Property; and	To the best of PGE's knowledge, after reasonable inquiry, only PGE or its contractors, conducted significant activities associated with the distribution network or submerged cables; see the responses to Questions 6b and 6g.	

EPA Question	Response	Records/Information Available
i. government entities that had proprietary (as opposed to regulatory) interest or involvement with regard to the activity on the Property.	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
7. Identify and describe any legal or equitable interest that you now have, or previously had in each Property. Include information regarding the nature of such interest: when, how, and from whom such interest was obtained; and when, how, and to whom such interest was conveyed, if applicable. In addition, submit copies of all instruments evidencing the acquisition or conveyance of such interest (e.g., deeds, leases, purchase and sale agreements, partnership agreements, etc.). Also provide all information and documentation regarding, but not limited to the following:	PGE properties are addressed in separate property-specific 104(e) responses. Except for the purpose of power transmission, PGE is not affiliated with any non-PGE properties through which the distribution network or submerged cables traverse other than through its distribution network and submerged cables easements, rights-of-way, licenses, and/or permits. Distribution Network: The various portions of the distribution network were constructed, installed, or acquired by PGE at various times, including acquisition/construction/installation by PGE predecessor companies prior to 1930, acquisition/construction/installation by PGE after 1930, and acquisition from Pacific Power & Light (now PacificCorp) in 1972 (see below). Prior to 1972, both PGE and Pacific Power & Light (now PacifiCorp) provided electric service within the Investigation Area. Both companies owned separate facilities (i.e., substations) and distribution networks within the Investigation Area. The two companies negotiated a consolidation agreement on July 18, 1972, securing approval from the Oregon Public Utility Commission for the exchange of service areas and facilities on December 15, 1972. As a result of this exchange, much of the electric service in Portland was subsequently consolidated into PGE ownership and operation. The facilities transferred to PGE included a significant number of power poles, electric distribution lines, and two substations within the Investigation Area. Prior to the facility exchange, much of the electrical distribution system in Portland, especially on the east bank of the Willamette, was owned and operated by Pacific Power & Light. The PacifiCorp Agreement is provided in a supplemental submittal (Supplemental Submittal S5). Some PGE-owned transformers within the distribution network are currently leased to the following customers: Certainteed Corporation, Consolidated Metco Inc, Crown Cork and Seal, Fred Meyer (the Kroger Company), Northwest Pipe and Casing Company, and Smurfit-Stone Container Division (the Container Corporation of America); see the attached available lease documentation. These customer-leased transformers are shown in the figure (Q04_Dist. Network Transformers.pdf) attached in response to Question 4 and described by the table (Q21a_Leased Transformer Table.pdf) attached in response to Question 21a. Unless the Distribution Services Department is hired for a specific job, PGE does not provide maintenance or repair of leased or customer-owned transformers. The distribution network has been altered, supplemented, expanded, and upgraded over time. PGE has numerous easements, rights-of-way, and permits for its distribution network. Per PGE's previous discussions with EPA, and with EPA's consent, these	Question 7 Attachments Q07_Certainteed.pdf Q07_Con Metco.pdf Q07_Cork and Seal.pdf Q07_Fred Meyer.pdf Q07_NW Pipe & Casing.pdf Q07_Smurfit.pdf Also see Question 4 Attachment Q04_Dist. Network Transformers.pdf Also see Question 13 Attachment Q13e_Sub. Cable Characteristics Table.pdf Also see Question 21 Attachment Q21a_Leased Transformer Table.pdf Also see Question 52 Attachments Q52_1911-03-21 Letter.pdf Q52_1996 USACE Permit to Replace Cables.pdf Q52_1996 DSL Removal-Fill Permit.pdf Q52_Permits for Laying Cables.pdf Q52_Permit for Telephone Cable.pdf

EPA Question	Response	Records/Information Available

documents have not been provided because of their large quantity, and the difficulty of compiling them.

Submerged Cables:

For the approximate location and available characteristics of the submerged cables within the Investigation Area, see the figures (Q04_Dist. Network Transformers.pdf) attached in response to Question 4 and the document (Q13e_Sub. Cable Characteristics Table.pdf) attached in response to Question 13e. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the permits that PGE (or a PGE predecessor company) has been granted for the installation and maintenance of the submerged cables:

- PGE predecessor companies (Portland Railway, Light, & Power Co and Portland General Electric Company) were granted permits to lay and maintain submerged cables within the vicinity of six bridges (four unspecified bridges, the Steel Bridge, and the Hawthorne Bridge) from the U.S. Army War Department in the early 1900s (pre-1906, 1906, 1910, and 1911); see the document (Q52_1911-03-21 Letter.pdf) attached in response to Question 52.

- In 1926, Portland Electric Power Company (a PGE predecessor company) was granted permits from the U.S. Army War Department and the Port of Portland to lay and maintain a submerged cable from East Clay Street to Columbia Street; see the document (Q52_Permits for Laying Cables.pdf) attached in response to Question 52.

- In 1938, PGE was granted a permit from the U.S. Army War Department to relocate the East Clay submerged cable upstream of Hawthorne Bridge; see the document (Q52_Permits for Laying Cables.pdf) attached in response to Question 52.

- In 1951, PGE was granted permits from the U.S. Army Corp of Engineers (USACE) and the Port of Portland to lay and maintain a communications cable upstream of Hawthorne Bridge; see the document (Q52_Permit for Telephone Cable.pdf) attached in response to Question 52.

- In 1996, PGE was granted a joint permit from the State of Oregon, Division of State Lands (DSL) and the USACE to replace submerged cables located upstream of the Hawthorne Bridge. To the best of PGE's knowledge, after reasonable inquiry, the cables (installed in 1997) were laid in trenches near shore, and laid along the river bottom at mid-channel; see the documents (Q52_1996 USACE Permit to Replace Cables.pdf and Q52_1996 DSL Removal-Fill Permit.pdf) attached in response to Question 52.

To the best of PGE's knowledge, after reasonable inquiry, PGE likely either operated under existing permits, or was granted permits to lay and/or replace the submerged cables installed in the downtown core crossing area (upstream of the Hawthorne Bridge) in 1931, 1944, 1947, and 1950; in the Harborton area in 1945; and in the vicinity of the Sellwood

EPA Question	Response	Records/Information Available
	Bridge and St. Johns Bridge (installation dates unknown).	
a. any deeds and/or transfer information between Respondent and Dulien Steel Products;	Not applicable. Question 7a is relevant only to the Rivergate North Substation. Information regarding this question is given in the 104(e) response for that site.	
b. deed and title information for Parcels R971340160, R971340180, R971350100, R971350480, R941191230, R971340130 and R971340200;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
c. a complete copy of the Memorandum of Contract Book 1292 p.616 for parcel R941191230, dated September 5, 1978;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
8. If you are the current owner and/or current operator, did you acquire or operate the Property or any portion of the Property after the disposal or placement of hazardous substances, waste, or materials on, or at the Property? Describe all of the facts on which you base the answer to this question.	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
9. At the time you acquired or operated the Property, did you know or have reason to know that any hazardous substance, waste, or material was disposed of on, or at the Property? Describe all investigations of the Property you undertook prior to acquiring the Property and all of the facts on which you base the answer to this question.	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
10. Identify all prior owners that you are	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	

EPA Question	Response	Records/Information Available
aware of for each Property identified in Response to Question 4 above. For each prior owner, further identify if known: a. The dates of ownership b. All evidence showing that they controlled access to the Property c. All evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at the Property during the period that they owned the Property.		
11. Identify all prior operators of the Property, including lessors, you are aware of for each Property identified in response to Question 4 above. For each such operator, further identify if known: a. the dates of operation; b. the nature of prior operations at the Property; c. all evidence that they controlled access to the Property; and d. all evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the Property during the period that they were operating the Property	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
12. If not included in response to any of the previous questions, please describe the purpose and duration of each aquatic lands lease Respondent or the operator of Respondent's Property(ies) ever obtained from the State of Oregon and provide a copy of each application for	PGE properties are addressed in separate property-specific 104(e) responses. To the best of PGE's knowledge, after reasonable inquiry, PGE does not have aquatic lands leases for the submerged cables within the Willamette River.	

EPA Question	Response	Records/Information Available
and aquatic lands lease obtained.		
Section 3.0 - Description of Each Property 13. Provide the following information about each Property identified in response to Question 4:		
a. property boundaries, including a written legal description;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
b. location of underground utilities (telephone, electrical, sewer, water main, etc.);	The distribution system and submerged cables are themselves electrical utilities. The distribution system includes underground cables that connect vaults. Transformer locations (above and below ground) within the distribution network are shown on the figure (Q04_Dist. Network Transformers.pdf) attached in response to Question 4. Power lines and underground cables connect these transformers. The submerged cables are located on the Willamette River bottom and may be partially or entirely covered by river sediment. The approximate submerged cable locations are shown on figure (Q04_Dist. Network Transformers.pdf) attached in response to Question 4.	See Question 4 Attachment Q04_Dist. Network Transformers.pdf
c. location of all underground pipelines whether or not owned, controlled or operated by you;	To the best of PGE's knowledge, after reasonable inquiry, there are no underground pipelines associated with the distribution network or submerged cables. Underground cables are located in electrical conduits, not pipelines.	
d. surface structures (e.g., buildings, tanks, pipelines, etc.);	Distribution Network: The distribution network is composed of power lines, underground cables, transformers, and the poles and vaults that together distribute power to PGE facilities and PGE customers. The distribution network stretches across PGE properties (owned or leased), as well as properties not owned or operated by PGE. Structures associated with the distribution network are limited to poles/towers, vaults, and transformers. Submerged Cables: To the best of PGE's knowledge, after reasonable inquiry, there are currently no surface structures associated with the submerged cables.	
e. over-water structures (e.g., piers, docks, cranes, etc.);	Although components of the distribution system may be over-water and the submerged cables are in water, to the best of PGE's knowledge, after reasonable inquiry, there are no over-water structures associated with the distribution network or submerged cables. PGE currently owns 16 submerged cables at three general locations within the Investigation	Question 13 Attachment Q13e_Sub. Cable Characteristics Table.pdf

EPA Question	Response	Records/Information Available
	Area along the Willamette River – at Harborton, Sellwood Bridge, and in the Downtown Core (upstream of the Hawthorne Bridge). Prior to 1968, a cable was located at a fourth location within the Investigation Area, near the St Johns Bridge. The submerged cables are nominally 11.1 kV or 12.5 kV and constructed of either rubber-insulated lead or ethylene-propylene rubber insulated (EPR). Armored by 48 galvanized steel cables, the cables are laid along the river bottom and often become covered by sediment over time. The attached document (Q13e_Sub. Cable Characteristics Table.pdf) describes the submerged cables and their respective locations.	
f. dry wells;	To the best of PGE's knowledge, after reasonable inquiry, there are no dry wells associated with the distribution network or submerged cables.	
g. treatment or control devices (e.g., surface water, air, groundwater, Resource Conservation and Recovery Act (RCRA), Transfer, Storage, or Disposal (TSD), etc.);	To the best of PGE's knowledge, after reasonable inquiry, there are no treatment or control devices associated with the distribution network or submerged cables.	
h. groundwater wells, including drilling logs;	To the best of PGE's knowledge, after reasonable inquiry, there are no groundwater wells associated with the distribution network or submerged cables.	
i. stormwater drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;	To the best of PGE's knowledge, after reasonable inquiry, there are no stormwater drainage systems or sanitary sewer systems associated with the distribution network or submerged cables.	
j. subsurface disposal field(s), Underground Injection Control (UIC) wells, and other underground structures (e.g., underground storage tanks (USTs); and where they are located, if they are still used, and how they were closed.	To the best of PGE's knowledge, after reasonable inquiry, there are no subsurface disposal fields, UIC wells, or underground storage tanks associated with the distribution network or submerged cables. The only underground structures are conduits and vaults associated with the distribution network, and the semi-buried submerged cables in the Willamette River.	
k. any and all major additions, demolitions or changes on, under or about the Property, its physical structures or to the Property itself (e.g., stormwater drainage, excavation work); and any planned additions, demolitions or other changes to the Property;	Distribution Network: The various portions of the distribution network and submerged cables were constructed, installed, or acquired by PGE at various times, including acquisition/construction/installation by PGE predecessor companies prior to 1930, acquisition/construction/installation by PGE after 1930, and acquisition from Pacific Power & Light (now PacificCorp) in 1972 (see below). The distribution network has been altered, supplemented, expanded, and upgraded over time. Prior to 1972, both PGE and Pacific Power & Light (now PacifiCorp) provided electric service within the Investigation Area. Both companies owned separate facilities (i.e., substations), distribution networks, and submerged cables the Investigation Area. Their overlapping service areas resulted in duplicative electric utility facilities. Recognizing the potential to	Question 13 Attachments Q13e_Sub. Cable Characteristics Table.pdf Q13k_Settlement Agreement.pdf Q13k_Settlement Correspondence.pdf Q13k_1988 Cable Accident Report.pdf Q13k_1985-08 Nicolai-Fremont Retaining Wall Plans.pdf Q13k_1985-09 Nicolai-Fremont Retaining Wall Plans.pdf Also see Question 4 Attachment Q04_Dist. Network Transformers.pdf

EPA Question	Response	Records/Information Available
	gain efficiency through consolidation the two companies negotiated a consolidation agreement on July 18, 1972. The two utilities secured approval from the Oregon Public Utility Commission for the exchange of service areas and facilities on December 15, 1972. As a result of this exchange, much of the electric service in Portland was subsequently consolidated into PGE ownership and operation. The facilities transferred to PGE included a significant number of power poles, electric distribution lines, and two substations within the Investigation Area. Prior to the facility exchange, much of the electrical distribution system in Portland, especially on the east bank of the Willamette, was owned and operated by Pacific Power & Light. The PacifiCorp Agreement is provided in a supplemental submittal (Supplemental Submittal S5). In 1985, plans were prepared describing the construction of retaining walls and footings at NW Nicolai Street and the Fremont Bridge; see the attached documents (Q13k_1985-08 Nicolai-Fremont Retaining Wall Plans.pdf and Q13k_1985-09 Nicolai-Fremont Retaining Wall Plans.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE has no further knowledge regarding these plans. Submerged Cables: The figures (Q04_Dist. Network Transformers.pdf) attached in response to Question 4 show the approximate location of the submerged cables. To the best of PGE's knowledge, after reasonable inquiry, the submerged cables were installed by laying them in trenches near shore and along the river bottom at mid-channel. See the available submerged cable permits (Q52_1911-03-21 Letter.pdf, Q52_Permits for Laying Cables.pdf, Q52_Permit for Telephone Cable.pdf, Q52_1996 USACE Permit to Replace Cables.pdf, and Q52_1996 DSL Removal-Fill Permit.pdf) attached in response to Question 52. To the best of PGE's knowledge, after reasonable inquiry, the attached document (Q13e_Sub. Cable Characteristics Table.pdf) identifies the submerged cables, thier operating voltage, approximate length, date of installation, and when they were removed from service (if applicable). Once removed from service, the cables are typically left along the river bottom. Submerged cables do not require maintenance or routine inspections as long as they are functioning normally. Significant changes with regards to the submerged cables include the following: • Pre-1906 – Submerged cables were present in the vicinity of four bridges. • 1906 – Installation of two submerged cables south of the Steel Bridge. • 1910/1911 – Installation of submerged cables in the vicinity of the Steel Bridge and the Hawthorne Bridge. • Post-1925 – Installation of a submerged in the vicinity of the Sellwood Bridge. • 1926 – Installation of a submerged cable from East Clay to Columbia St. • 1931 – Installation and/or replacement of a submerged cable upstream of the Hawthorne Bridge. • Post-1931 – Installation of a submerged cable in the vicinity of the St. Johns Bridge.	Also see Question 52 Attachments Q52_1996 USACE Permit to Replace Cables.pdf Q52_1996 DSL Removal-Fill Permit.pdf Q52_1911-03-21 Letter.pdf Q52_Permits for Laying Cables.pdf Q52_Permit for Telephone Cable.pdf

EPA Question	Response	Records/Information Available
	• 1938 – Relocation of the East Clay submerged cable upstream of Hawthorne Bridge. • 1944/1947/1950 – Installation and/or replacement of submerged cables upstream of the Hawthorne Bridge. • 1945 – Installation of two submerged cables in the vicinity of Harborton. • 1951 – Installation of a communications cable upstream of Hawthorne Bridge. • 1968 – Removal of the submerged cable in the vicinity of the St. Johns Bridge. • 1988 – One of the submerged cables located upstream of the Hawthorne Bridge was severed by a barge brindle line in December 1988. PGE subsequently spliced a new section of cable into place, leaving the damaged section on the river bottom. In October 1994, PGE reached a settlement with the responsible parties; see the attached documents (Q13k_1988 Cable Accident Report.pdf, Q13k_Settlement Correspondence.pdf, and Q13k_Settlement Agreement.pdf). • 1997 – Replacement of several submerged cables located upstream of the Hawthorne Bridge.	
l. all maps and drawings of the Property in your possession; and	Distribution Network: The locations of PGE-owned, leased, and customer-owned transformers within the distribution network are shown in the document (Q04_Dist. Network Transformers.pdf) attached in response to Question 4. The locations of spills within the distribution network are shown in the document (Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. Submerged Cables: The location of the submerged cables are depicted in the document (Q04_Dist. Network Transformers.pdf) attached in response to Question 4. Submerged cables are also shown in the attached document (Q13l_Cable Crossing Dwg 1940.pdf).	Question 13 Attachment Q13l_Cable Crossing Dwg 1940.pdf Also see Question 4 Attachment Q04_Dist. Network Transformers.pdf Also see Question 62 Attachment Q62_Spills & Damaged Equip.pdf
m. all aerial photographs of the Property in your possession.	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	
n. all information requested in (a) through (m) above regarding, but not limited to, the following:		
i. the Portland General Electric Station L location on 1841 SE Water Ave;	See the separate 104(e) response for Station L	
ii. the Portland General Electric Station E location on 2635 NW Front Ave;	See the separate 104(e) response for Station E.	
iii. the Portland General Electric Station N location on 6616 N Lombard St.;	See the separate 104(e) response for Station N.	

EPA Question	Response	Records/Information Available
14. For Properties adjacent to the Willamette River, provide specific information describing the river-ward boundary of private ownership and where state aquatic lands and/or state-management jurisdiction begins. Provide a map that delineates the river-ward boundary of each Property.	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses	
15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.	Distribution Network: PGE has periodically conducted site investigations to assess spill clean up and geotechnical suitability for pole construction: • In 1983, the Oregon State Highway Department performed a series of test borings along Yeon Avenue in preparation for the installation of a storm sewer line; see the attached Supplemental Soils and Geology Report (Q15_1983 ODOT Geology Report - Yeon Ave.pdf), which describes the soils and geology of the area. • Between 1994 and 2001, PGE collected soil, water, oil, and surface wipes from vaults and/or manholes. These media were analyzed for polychlorinated biphenyls (PCBs); total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylene (BTEX); metals; and/or asbestos. In general, the analyses were used to determine how to properly dispose of vault water and debris. o Between June and November 1994, PGE sampled a series of manholes. In the course 12 sampling events, PGE collected 77 soil, water, oil, or wipe samples for laboratory analysis of PCBs, TPH, BTEX, metals, and/or asbestos. These chemicals were detected at a range of concentrations at the various manholes. For further details, see the attached laboratory results (Q15_1994 Manhole Test Results.pdf). o On May 7, 1996, PGE collected an oil sample from an underground vault located on SW Broadway in Portland, Oregon. Laboratory results did not detect PCBs and indicated that the sample was probably an emulsion of heavy petroleum products; see the attached laboratory report (Q15_1996-05-07 SW Broadway UV.pdf). o On April 26, 2001, PGE collected a sludge sample from a vault located at SW 4th Avenue and Stark Street in Portland, Oregon in conjunction with an asbestos removal project. Laboratory results detected Aroclor 1254 at concentration of 0.130 ppm; see the attached laboratory report (Q15_2001-04-26 4th & Stark Vault.pdf). • In 2002, GeoEngineers prepared geotechnical reports evaluating the appropriateness of installing steel power poles in proposed locations on NW Nicolai Street and NW	Question 15 Attachments Q15_1994 Manhole Test Results.pdf Q15_1996-05-07 SW Broadway UV.pdf Q15_2001-04-26 4th & Stark Vault.pdf Q15_2006-09-13 Cable Lab Results.pdf Q15_1983 ODOT Geology Report - Yeon Ave.pdf Q15_2002 GeoEngineers Nicolai St Geotech Report.pdf Q15_2002 GeoEngineers Thurman St Geotech Data.pdf Q15_2002 GeoEngineers Thurman St Geotech Rpt.pdf Also see all Question 21 Attachments Also see all Question 62 Attachments

EPA Question	Response	Records/Information Available
	Thurman Street; see the attached documents (Q15_2002 GeoEngineers Nicolai St Geotech Report.pdf, Q15_2002 GeoEngineers Thurman St Geotech Data.pdf, and Q15_2002 GeoEngineers Thurman St Geotech Rpt.pdf). These reports concluded that conventional shaft foundations could support the planned power poles. • On September 12, 2006, PGE conducted wipe tests for PCBs on an underground cable at Stephens Substation; see the attached laboratory report (Q15_2006-09-13 Cable Lab Results.pdf). This test found no detectable concentration of PCBs as Aroclors. For further information on spills and releases, see the response and documents attached for Question 62. For waste and used material disposal, see the response and documents attached in response to Question 21. Submerged Cables: To the best of PGE's knowledge, after reasonable inquiry, there are no reports, information, or date related to soil, water, air quality, or geology/hydrogeology associated with the submerged cables.	
16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following information:	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not manage or dispose of waste or materials along the distribution network or near the submerged cables.	
a. a map showing the unit/area's boundaries and the location of all known units/areas whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units/areas;		
b. dated aerial photograph of the site showing each unit/area;		
c. the type of unit/area (e.g., storage area, landfill, waste pile, etc.), and the		

EPA Question	Response	Records/Information Available
dimensions of the unit/area; d. the dates that the unit/area was in use; e. the purpose and past usage (e.g., storage, spill containment, etc.); f. the quantity and types of materials (hazardous substances and any other chemicals) located in each unit/area and; g. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit/area.		
17. If the unit/area described above is no longer in use, how was such unit/area closed and what actions were taken to prevent or address potential or actual releases of waste constituents from the unit/area.	Not applicable. See response to Question 16.	
18. For each Property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River: a. the location and nature of each sewer line, drain, ditch, or tributary; b. the date of construction of each sewer line, drain, ditch, or tributary; c. whether each sewer line, or drain was ever connected to a main trunk line; d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River;	Not applicable. PGE properties are addressed in separate property-specific 104(e) responses.	

EPA Question	Response	Records/Information Available
and e. any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include, but not be limited to: i. the areas serviced by the outfalls; and ii. the type of outfall (i.e., stormwater or single facility operational).		
19. Provide copies of any stormwater or property drainage studies, including data from sampling, conducted at these Properties on stormwater, sheet flow, or surface water runoff. Also provide copies of any Stormwater Pollution Prevention, Maintenance Plans or Spill Plans developed for different operations during the Respondent's operation of each Property.	PGE does not have any stormwater or property drainage studies, or a Stormwater Pollution Prevention Plan related to the distribution network or submerged cables. The attached documents reflect PGE's general spill response procedures.	Question 19 Attachments Q19_Oil Spill First Response.pdf Q19_Oil Spill Response Team.pdf Q19_Environmental Services Oil Spill Instruction.pdf Q19_Oil Spill Cleanup Procedures.pdf
Section 4.0 - Respondent's Operational Activities		
20. Describe the nature of your operation or business activities at each Property. If the operation or business activity changed over time, please identify each separate operation or activity, the dates when each operation or activity was started and, if applicable, ceased.	The purpose of the distribution network and submerged cables is to provide continuous electrical power to customers and to protect the public and equipment from electrical and mechanical faults. Distribution Network: The various portions of the distribution network were constructed, installed, or acquired by PGE at various times, including acquisition/construction/installation by PGE predecessor companies prior to 1930, acquisition/construction/installation by PGE after 1930, and acquisition from Pacific Power & Light (now PacificCorp) in 1972; see the responses to Questions 7 and 13k for further details. The distribution network has been altered, supplemented, expanded, and upgraded over time. Activities/operations related to the distribution network include: installation and	See Question 13 Attachment Q13e_Sub. Cable Characteristics Table.pdf

EPA Question	Response	Records/Information Available
	maintenance of poles, lines, vaults, underground cables, and transformers; spill response; periodic removal of water accumulated in vaults; and replacement or removal of the poles, lines, vaults, underground cables, and transformers as needed. Submerged Cables: Submerged cables were installed, repaired, and/or removed by PGE at various times from the early 1900s to 1997; see the response to Questions and 13k for further details, as well as the document (Q13e_Sub. Cable Characteristics Table.pdf) attached in response to Question 13e. Activities/operations related to the submerged cables include: installation and repair of the cables. The cables do not require periodic inspections or maintenance. Once laid, PGE conducts no activities related to the cables unless malfunctions occur.	
21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding question is anything but an unqualified "no," identify:		
a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	Distribution Network: Most of the functions of the distribution network are automatic and occur without direct supervision. No wastes are generated during regular operations. Periodically, equipment is taken out of service for off-site maintenance. During these periods, waste material may be generated. Typical waste materials include scrap metal, wood, and wire; plastic coverings and connectors; and obsolete equipment. Obsolete equipment includes transformers, bushings, underground cable, and cable connectors (i.e., potheads). Right-of-way maintenance sometimes produces vegetation cuttings. Underground cables within the distribution network have one of two constructions: paper insulated lead covered (PILC) or EPR. The insulating paper used in PILC cables is saturated with oil, which may or may not contain PCBs. PGE stopped purchasing PILC cables in approximately 1988. During normal operation, these PILC cables remain intact and do not leak. When these cables are weakened (e.g., at a failing splice), punctured, or severed, they may slowly leak small volumes of oil. These releases and resulting cleanup wastes are cleaned up by underground cable maintenance crews. Soil and gravel removed from along the distribution network (from upgrades, equipment spill response, or shoveled from vaults) are tested and disposed of appropriately, as needed. Clean up activities generate wastes that include absorbent material, leaking/obsolete transformers, and water, soil, gravel, and/or vegetation impacted by oil. For further details on spills and releases, see the response and documents attached for Question 62.	Question 21a Attachments Q21a_Vault Water Disposal Flow Chart.pdf Q21a_Waste Stream Summary.pdf Q21a_PGE Owned & Operated Transformer Table.pdf Q21a_Customer Owned Transformer Table.pdf Q21a_Leased Transformer Table.pdf Q21a_1981 Transformers at Food Estab.pdf Q21c_Dewatering Box Disposal Mnft 2002-2009.pdf Q21c_2008-11-04 Dewatering data.pdf Q21c_2009-10-05 Dewatering data.pdf Q21c_2009-10-05 Dewatering Profile.pdf Also see Question 29 Attachment Q29_Operations-Waste Schematic.pdf Also see Question 33 Attachment Q33_EMC List.pdf Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf Also see all Question 62 Attachments

EPA Question	Response	Records/Information Available

In addition to these wastes, stormwater that accumulates in vaults may periodically need to be removed in order to perform maintenance. Water was pumped from the vaults and transported to Harborton for filtration. Between 1996 and 2002, PGE discharged approximately 41,500 gallons of filtered vault water to the City of Portland sanitary sewer at PSC. Documents describing the water volumes, filtration, testing, and approved disposal are attached in response to Question 18 of the separate 104(e) response for Harborton.

Since 2002, water and debris (e.g., sludge, leaves) removed from underground vaults are handled in different ways depending on their likelihood of contamination. Handling of the removed underground vault materials is generally described by the attached document (Q21a_Vault Water Disposal Flow Chart.pdf) and disposal of these materials is more specifically described by the document (Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Vault water that appears to contain sewage is removed and disposed of by one of several contractors (i.e., NRC Environmental Services, Pacific Powervac, or MRP Services). Vault water that appears to contain oil is handled by PGE's spill response crew according to the spill response procedures described in the documents attached to Question 19. Water and sludge recovered by the spill response crew is generally transported to Wilsonville Line Center where it is discharged to a dewatering box. Water and solids periodically collected from the dewatering box are tested and appropriately disposed of. See the documents (Q21c_Non Haz Waste Mnft 2006-2009.pdf, Q21c_2008-11-04 Dewatering data.pdf, Q21c_2009-10-05 Dewatering data.pdf, and Q21c_2009-10-05 Dewatering Profile.pdf) attached in response to Question 21c.

The attached document (Q21a_PGE Owned & Operated Transformer Table.pdf) lists the PGE-owned, oil-filled distribution equipment currently connected to the distribution lines within the Investigation Area. The attached document (Q21a_Leased Transformer Table.pdf) lists the leased, oil-filled equipment currently within the Investigation Area. And the attached document (Q21a_Customer Owned Transformer Table.pdf) lists the customer-owned, oil-filled equipment currently within the Investigation Area that are listed in the distribution network database. However, there likely are other customer-owned, oil-filled transformers and equipment within the Investigation Area that are not in PGE's database. To the best of PGE's knowledge, after reasonable inquiry, these documents identify the location, serial number, year manufactured, detected PCB concentrations and the date tested for PCBs, and oil volume of transformers in the distribution network. A list of food establishments with PGE transformers in 1981 and copies of inspections from that year are attached (Q21a_1981 Transformers at Food Estab.pdf).

The products/materials currently used at PGE properties within Oregon and potentially used in the distribution network are listed in the document (Q33_EMC List.pdf) attached in response to Question 33. Material Safety Data Sheets (MSDS) are provided in a supplemental submittal (Supplemental Submittal S2). Products/materials used in the past are similar to those used currently.

EPA Question	Response	Records/Information Available
	To the best of PGE's knowledge, after reasonable inquiry, those companies/persons with whom PGE currently has arrangements for disposal/recycling/destruction of wastes and/or used material are listed in the attached document (Q21a_Waste Stream Summary.pdf). The document summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal/recycling facility. To the best of PGE's knowledge, after reasonable inquiry, all companies/persons with whom PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for the distribution network in Oregon are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40. Submerged Cables: The submerged cables require no maintenance after installation. To the best of PGE's knowledge, after reasonable inquiry, these cables produce no waste unless repairs are needed. When a submerged cable is damaged, the damaged portion can sometimes be spliced out. Small sections (e.g., tens of feet) of excised cable can be sold for scrap metal. Large splices (e.g., hundreds of feet, such as the one that occurred in 1989) that are too heavy to be moved may be left in place. To the best of PGE's knowledge, after reasonable inquiry, no records are available regarding materials or wastes related to the submerged cables. To the best of PGE's knowledge, after reasonable inquiry, only two of the submerged cables contain any oil or liquid. The Harborton submerged cables (which are no longer in service) contained, and may still contain, oil. Two oil tanks were historically located at the western cable terminal near the southern boundary of the Harborton property. Please see the separate 104(e) response for Harborton for more information regarding this historical cable terminal and associated oil tanks.	
b. the chemical composition, characteristics, physical state (e.g.. solid. liquid) of each waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	Distribution Network: Maintenance performed along the distribution network consists of connecting, disconnecting, or replacing components. The primary materials used for maintenance are solid and include wire, cables, power poles, replacement transformers, etc. The use of chemicals is essentially limited to lubricants (liquid), wood pole preservative (liquid), and herbicides (liquid). The chemical composition, characteristics, and physical state of chemical products potentially used along the distribution network are described in the MSDS documents for the products/materials currently used along the distribution network within Oregon, which are provided in a supplemental submittal (Supplemental Submittal S2). Vault water (liquid) and debris (solid) are generated along the distribution network when stormwater accumulates in vaults and they must be removed to perform maintenance. The chemical composition of vault water varies and it may contain chemicals related to normal vehicular traffic, oil from illegal dumping, transformer oil from malfunctioning equipment, or sewage from nearby leaking pipes. Debris (e.g., sludge and leaves) may also be present in vaults and often have a chemical composition similar to that of the associated vault water. Prior to disposal, any vault water or debris generated is evaluated for potential	Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 15 Attachments Q15_1994 Manhole Test Results.pdf Q15_1996-05-07 SW Broadway UV.pdf Q15_2001-04-26 4th & Stark Vault.pdf Q15_2006-09-13 Cable Lab Results.pdf

EPA Question	Response	Records/Information Available
	contamination and tested if necessary to determine an appropriate disposal facility. In general, soil (solid), gravel (solid), and water (liquid) removed from equipment upgrades or spill responses are tested (for petroleum-hydrocarbons and/or PCB contamination) and disposed of appropriately, as needed. Submerged Cables: The submerged cables require no maintenance after installation. To the best of PGE's knowledge, after reasonable inquiry, these cables produce no waste unless repairs are needed. If cables become damaged and require splicing to repair them, the sections of spliced out cable are removed, if possible. Very large splices that become unwieldy may be left in place. Also see the response and documents attached for Question 21c, below.	
c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and	To the best of PGE's knowledge, after reasonable inquiry, no waste or materials are/were stored on properties associated with the distribution network or submerged cables. In general, wastes and used materials from the distribution network and submerged cables within the Investigation Area are/were transported directly to the appropriate disposal facility, or transported to a PGE waste and used materials handling facility or the Hawthorne Building (only underground cable and potheads) for interim storage prior to disposal/recycling/destruction. Historically, PGE's waste and used materials handling facilities were Harborton Substation (located at 12500 NW Marina Way, Portland, OR), Sellwood Substation (located at 8856 SE 13th Ave), Portland Service Center (PSC) (located at 3700 SE 17th Ave, Portland, Oregon), or Wilsonville (located at 9480 SW Boeckman Rd, Wilsonville, Oregon - only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and used materials handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs). PGE's underground cable crews use the Hawthorne Building as interim storage for underground cables and potheads. Materials potentially contaminated with PCBs are sealed in barrels and transferred to PGE's waste and used materials handling facility (currently at PSC). If these materials are generated by the underground cable crews, the wastes (e.g., potheads) are collected at the Hawthorne Building and then transferred to PSC.. Once received at the waste and used materials handling facility, these wastes are tested to determine a disposal location appropriate for their PCB concentration or are assumed to contain PCBs. These wastes include: • Used/excess lubricants, oils, and other fluids • Obsolete equipment (e.g., transformers, capacitors) • Rags used to clean equipment • Absorbent material used to clean up leaks or spills • Ballasts • Potheads Wastes not contaminated with PCBs (< 50 ppm) are containerized separately and transferred to	Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf Q21c_HID and Fluorescent Tube Storage Instructions.pdf Q21c_PGE Aerosol Can Disposal Flowchart 2006.pdf Q21c_PGE Battery Flow Chart 2007.pdf Q21c_PGE Bulb & Tube Recycling Flowchart 2006.pdf Q21c_Dewatering Box Disposal Mnft 2002-2009.pdf Q21c_2008-11-04 Dewatering data.pdf Q21c_2009-10-05 Dewatering data.pdf Q21c_2009-10-05 Dewatering Profile.pdf Also see all Question 39 Attachments Also see Question 52 Attachments Q52_01.pdf

EPA Question	Response	Records/Information Available
	PGE's waste and used materials handling facility (currently at PSC). If these materials are generated by the underground cable crews, the wastes (e.g., underground cables) are collected at the Hawthorne Building prior to recycling at Calbag Metals. The Toxic Substances Control Act (TSCA) regulation standard and accepted industry standard is to use the term "non-PCB" to describe oils with < 50 ppm PCBs; this term is used throughout this document. These include: • Solvents • Scrap metal • Light bulbs • General garbage and recycling • Obsolete equipment (e.g., transformers, capacitors, ballasts) • Wood utility poles • Underground cables Soil and gravel removed during excavations (from installations or equipment spill responses) are tested and disposed of appropriately. The soil and gravel are either transported directly from the site to the disposal facility, or are transported to Wilsonville and/or PSC for interim storage before bulk disposal at a location appropriate for its PCB content. Currently, new power poles are typically pre-treated by the manufacturer with pentachlorophenol (PCP). Historically, power poles have been made of untreated cedar poles or other wood pre-treated by the manufacturer with PCP, creosote, or other common wood preservatives. Currently obsolete wooden utility poles are cut to separate the heavily pre-treated lower end from the less pre-treated upper end. The lower ends are consolidated at the Harborton pole yard and then disposed of at the Hillsboro Landfill. The upper ends are given away to the public for a variety of non-PGE uses. The document (Q39_Notice to Public.pdf) attached in response to Question 39 is posted at the obsolete pole pickup site at Harborton pole yard. Vault water is generated when stormwater that accumulates in vaults must be removed to perform maintenance. Between 1996 and 2002, PGE discharged approximately 41,500 gallons of filtered vault water to the City of Portland sanitary sewer at PSC. This water was pumped from vaults and transported to Harborton for filtration. Documents describing the water volumes, filtration, testing, and approved disposal are attached in response to Question 18 of the separate 104(e) response for Harborton. Since 2002, water and debris (e.g., sludge, leaves) removed from underground vaults are handled in different ways depending on its likelihood of contamination. Handling of the removed underground vault materials is generally described by the document (Q21a_Vault Water Disposal Flow Chart.pdf) attached in response to Question 21a and disposal of these materials is more specifically described by the document (Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Vault water that appears to contain sewage is removed and disposed of by one of several contractors (i.e., NRC Environmental Services, Pacific Powervac, or MRP Services); see the documents (Q39_MRP POs 2004 to 2009.pdf, Q39_NRC	Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf

EPA Question	Response	Records/Information Available
	POs 2004 to 2009.pdf, and Q39_Pacific Power Vac PO.pdf) attached in response to Question 39. Vault water that appears to contain oil is handled by PGE's spill response crew according to the spill response procedures described in the documents attached to Question 19. Water and solids recovered by the spill response crew are generally transported to Wilsonville Line Center where it is discharged to a dewatering box. Water and solids periodically collected from the dewatering box are appropriately disposed of after testing. The attached documents provide chemical data (Q21c_2008-11-04 Dewatering data.pdf, Q21c_2009-10-05 Dewatering data.pdf, and Q21c_2009-10-05 Dewatering Profile.pdf) and disposal records (Q21c_Dewatering Box Disposal Mnft 2002-2009.pdf) for the water from within the dewatering box. Please note that the dewatering box may receive water from multiple sources within and outside the Investigation Area and, thus, does not exclusively represent vault water from the distribution network within the Investigation Area. See the attached documents for descriptions of PGE's general waste and used materials handling procedures. The attached mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred associated with the distribution network. To the best of PGE's knowledge, after reasonable inquiry, those companies/persons with whom PGE currently has arrangements for disposal/recycling/destruction of wastes and/or used material are listed in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. Also see the waste disposal permits attached in response to Question 52. See the separate 104(e) responses for the Hawthorne Building, where the underground department temporarily stores underground cables and potheads, and the Harborton Substation, historically a PGE waste and used materials handling facility, which are both within the Investigation Area. Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	
d. the quantity of each such waste or material used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you.	Waste is generated during equipment maintenance and upgrades. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the exact quantities of oil or routine maintenance waste removed from or generated by the distribution network. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the quantity of construction debris generated by the distribution network in any year. Soil and gravel removed during excavations (from installations or equipment spill responses) are tested and disposed of appropriately. These are generally transported directly from the site to the disposal facility or to Wilsonville/PSC, depending on concentration of PCB/petroleum hydrocarbon-contamination. Between 1996 and 2002, PGE filtered approximately 41,500 gallons of vault water at Harborton Substation and discharged it to the City of Portland sanitary sewer at PSC. Documents describing the water volumes, filtration, testing, and approved disposal are attached to Question 18 of the separate 104(e) response for Harborton. Since 2002, water and debris (e.g., sludge, leaves) removed from underground vaults are handled in different ways depending on its	

EPA Question	Response	Records/Information Available
	likelihood of contamination. To the best of PGE's knowledge, after reasonable inquiry, the exact quantities of vault water and associated debris are unknown. For further waste documentation/information, see the responses to Questions 21a through 21c. Also see the waste and materials documentation provided in the separate 104(e) response for the Harborton Substation, which was historically a waste and used materials handling facility and is within the Investigation Area, the separate 104(e) response for the Hawthorne Building, where the underground department temporarily stores underground cables and potheads, and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	
22. Describe all activities at each Property that was conducted over, on, or adjacent to, the Willamette River. Include in your description whether the activity involved hazardous substances, waste(s), or materials and whether any such hazardous substances, waste(s), or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located in the Willamette River.	Distribution Network: To the degree that some transformers in the distribution network are over or near the Willamette River, PGE activities and operations at these transformers would be limited to equipment replacement or upgrades, as needed. Activities related to miscellaneous spills are limited to clean up efforts conducted at release sites. To the best of PGE's knowledge, after reasonable inquiry, all documented releases since 1979 (the year in which PGE initiated its spill reporting system and database) are compiled and summarized in the document (Q62_Miscellaneous Spill Table.pdf) attached in response to Question 62. The figure (Q62_Spills & Damaged Equip.pdf) attached in response to Question 62 shows the approximate location of documented releases since 1979. None of these spills were over or on the Willamette River; a few were adjacent to the river. For further details on spills and releases, see the response and documents attached for Question 62. Submerged Cables: Submerged cables are currently located at three general locations in the Willamette River within the Investigation Area. Over-water/in-water activities associated with the submerged cables are limited to: • Minimal trenching near shore and placement (laying) of the cable along the river bottom at mid-channel during submerged cable installation. • Repairs or replacement of submerged cables in the event that they become damaged or fail. Submerged cables have been installed to replace failed cables within the downtown crossing area (upstream of the Hawthorne Bridge). Although infrequently performed, splicing has been used to repair a few failed submerged cables. Splicing entails pulling the damaged section of cable onto a barge and repairing the cable above water before returning it to the river bottom. See the document (Q13e_Sub. Cable Characteristics Table.pdf) attached in response to Question 13e. PGE does not conduct any routine activities on submerged	See Question 13 Attachments Q13e_Sub. Cable Characteristics Table.pdf Also see all Question 62 Attachments

EPA Question	Response	Records/Information Available
	cables.	
23. For each Property at which there was or is a mooring facility, dock, wharf or any over-water structure, provide a summary of over-water activities conducted at the structure, including but not limited to, any material loading and unloading operations associated with vessels, materials handling and storage practices, ship berthing and anchoring, ship fueling, and ship building, retrofitting, maintenance, and repair.	Distribution Network: To the degree that some transformers in the distribution network are over or near water, PGE activities and operations at these transformers would be limited to equipment replacement or upgrades, as needed. Submerged Cables: Submerged cables are currently located at three general locations in the Willamette River with the Investigation Area. Over-water/in-water activities associated with the submerged cables are limited to minimal trenching near shore and placement (laying) of the cable along the river bottom mid-channel during submerged cable installation, and repairs should the cables be damaged. PGE does not conduct routine activities on the submerged cables.	
24. Describe all activities conducted on leased aquatic lands at each Property. Include in your description whether the activity involved hazardous substances, waste, or materials and whether any such hazardous substances, waste, or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located on such leased aquatic lands.	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not lease aquatic lands related to the distribution network or submerged cables addressed in this response.	
25. Please describe the years of use, purpose, quantity, and duration of any application of pesticides or herbicides on each Property during the period of investigation (1937 to the present). Provide the brand name of all pesticides or herbicides used.	Herbicide use along the distribution network in the Investigation Area is limited to stump treatment. After removing trees, PGE treats stumps to prevent re-growth. PGE has used Garlon 3A in a 50/50 mix with water for stump treatment since approximately 1980/1982. It is applied as needed, typically every five years, and approximately 2.5 gallons of the 50/50 mix are applied when used along the distribution network. To the best of PGE's knowledge, after reasonable inquiry, there are no herbicide or pesticide application records prior to 1980. Pesticide use along the distribution network is limited to treatment of wooden power poles and small amounts of wasp killer, as needed. Wood utility poles are treated with SMDC-FUME to preserve them from decay. The poles are treated about every 10 years, and each pole requires approximately 1 to 2 pints of preservative when treated. Approximately 85% of the poles need	

EPA Question	Response	Records/Information Available
	treatment, which is performed by the Davey Tree Surgery Company. To the best of PGE's knowledge, after reasonable inquiry, there is no pesticide or herbicide use related to the submerged cables.	
26. Describe how wastes transported off the Property for disposal are and ever were handled, stored, and/or treated prior to transport to the disposal facility.	To the best of PGE's knowledge, after reasonable inquiry, no waste or materials are or have been stored along the distribution network. In general, wastes and used materials from within the Investigation Area are/were either transported directly to the appropriate disposal facility, or transported to a PGE waste and used materials handling facility or the Hawthorne Building (only underground cable and potheads) for interim storage prior to disposal/recycling/destruction. Historically, PGE's waste and used materials handling facilities were Harborton Substation, Sellwood Substation, PSC, or Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and used materials handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs). PGE's underground cable crews use the Hawthorne Building as interim storage for underground cables and potheads. For further waste information, see the response and waste documentation attached for Questions 21 and 52.	See all Question 21 Attachments Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf
27. Has Respondent ever arranged for disposal or treatment or arranged for transportation for disposal or treatment of materials to any Property (including the Willamette River) within the Investigation Area? If so, please identify every Property that Respondent's materials were disposed or treated at in the Investigation Area. In addition, identify:	To the best of PGE's knowledge, after reasonable inquiry, waste and materials were not disposed along the distribution network. To the best of PGE's knowledge, after reasonable inquiry, no wastes from the distribution network were disposed into the Willamette River.	
a. the persons with whom the Respondent made such arrangements;	In general, waste and used materials from within the Investigation Area are either transported directly to the appropriate disposal facility, or transported to the Hawthorne Building (only underground cables and potheads) or a PGE waste and used materials handling facility for interim storage prior to disposal/recycling/destruction. Historically, PGE's waste and used materials handling facilities were Harborton Substation, Sellwood Substation, PSC, or Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and used materials handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs). The Hawthorne Building is used for interim storage of underground cable and potheads generated by the underground cable crews. The Harborton Substation and Hawthorne Building are both within the Investigation Area and is addressed in separate 104(e) responses.	Question 27 Attachment Q27_Waste-Materials Receivers within IA.pdf Also see Question 39 Attachments Q39_MRP POs 2004 to 2009.pdf Q39_Pacific Power Vac PO.pdf

EPA Question	Response	Records/Information Available

To the best of PGE's knowledge, after reasonable inquiry, companies/persons with whom PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for the distribution network and submerged cables in Oregon are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40. To the best of PGE's knowledge, after reasonable inquiry, those companies currently used are listed in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. Of those listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40, those companies within the Investigation Area are summarized in the attached document (Q27_Waste-Materials Receivers within IA.pdf) and include the following:

- Acme Trading & Supply – located at 4927 NW Front Ave, Portland, OR
- AGG Enterprises Inc. – located at 5555 N Channel Ave #3, Portland, OR
- Ash Grove Cement Company – located at 13939 N Rivergate Blvd, Portland, OR
- Bingham Willamette (now Sulzer Pumps) – located at 2800 NW Front Ave, Portland, OR
- **Calbag Metals** – located at 2495 NW Nicolai St and 12005 N Burgard Way, Portland, OR
- Cascade General Inc – located at 5555 N Channel Rd, Portland, OR
- **General Electric Company** – located at 2535 NW 28th Ave, Portland, OR
- **MRP Services** – 3333 NS 35th Avenue, Portland, OR
- Northwest Natural Gas Co – located at 123 NW Flanders, Portland, OR
- Nudleman & Sons – located at 2707 NW Nela, Portland, OR
- Oregon Hydrocarbon/TPS Technologies – located at 9333 N Harborgate St, Portland, OR
- **Pacific Powervac** – located at 4927 NW Front Avenue, Portland, OR
- Port of Portland – located at 121 NW Everett Street, Portland, OR
- Schnitzer Steel – located at 3200 NW Yeon Ave and 12005 N Burgard Way, Portland, OR
- Tyee Construction Company of Oregon – located at 12005 Burgard Way, Portland, OR
- Univar – located at 3950 NW Yeon Ave and 10821 N Lombard St, Portland, OR
- Western Steel Cast – located at 3070 SW Moody, Portland, OR

To the best of PGE's knowledge, after reasonable inquiry, those companies listed above in **bold** have been identified as having received waste from the distribution network based on the response and documents attached in response to Questions 21 and 39. General Electric Company was used as a transformer transfer facility by PGE. Since it is likely that this facility received distribution network equipment it is also listed in **bold**, above. The other (non-bold) companies/persons listed above have historically received or currently receive waste and/or used materials from the PGE waste and used materials handling facilities, which may have included waste and/or used materials from the distribution network and submerged cables.

The Harborton Substation, a historical PGE waste and used materials handling facility, is within the Investigation Area and is addressed in a separate 104(e) response. Also see the

EPA Question	Response	Records/Information Available
	supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network or submerged cables (Supplemental Submittal S7).	
b. every date on which Respondent made such arrangements;	To the best of PGE's knowledge, after reasonable inquiry, Calbag Metals, MRP Services, and Pacific Powervac have received waste from the distribution network. Calbag Metals receives underground cables from the distribution network, after interim storage at the Hawthorne Building. MRP Services and Pacific Powervac have received (vault water) from the distribution network after approximately 2002. For further details see the response and documents attached for Questions 21 and 39. General Electric Company was used as a transformer transfer facility by PGE. Since it is likely that this facility received distribution network equipment it is also listed in **bold** in the response to Question 27a. Available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the Harborton 104(e) response (a historical PGE waste and used materials facility), the Hawthorne Building 104(e) response (used for interim storage of underground cables and potheads), the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).	See all Question 21 Attachments Also see Question 39 Attachments Q39_MRP POs 2004 to 2009.pdf Q39_Pacific Power Vac PO.pdf
c. the nature, including the chemical content, characteristics, physical state (e.g., solid, liquid) and quantity (volume and weight) of all materials involved in each such arrangement;	Historically, used oil and maintenance waste (including petroleum hydrocarbon and/or PCB contaminated waste) were transported to Harborton Substation, Sellwood Substation, or PSC for interim storage prior to disposal or recycling. Currently, used oil and maintenance waste are transported to PSC for interim storage prior to disposal or recycling. Underground cable wastes (i.e., underground cables and potheads) are transported to Hawthorne Building for consolidation before being transported directly to a disposal facility or being transferred to PSC for further consolidation and subsequent disposal. The amount of waste generated during distribution network operations associated with equipment maintenance varies. The submerged cables produce no equipment maintenance wastes. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the exact quantities/characteristics of oil or routine maintenance waste removed from the distribution network. To the best of PGE's knowledge, after reasonable inquiry, disposal/recycling facilities with which PGE has made arrangements for disposal/recycling of wastes associated with the distribution network or submerged cables are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40. The document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal/recycling facility. Of those listed, the following is a description of the waste and used materials disposed or recycled at facilities within the Investigation Area: • Acme Trading & Supply – Used (but not obsolete) transformers (solid) and ballasts	See all Question 15 Attachments Also see Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf

EPA Question	Response	Records/Information Available

(solid)
- AGG Enterprises Inc. – Mixed non-hazardous waste (various) and recyclables
- Ash Grove Cement Company – PCB waste: oil (liquid) with PCBs < 50 ppm
- Bingham Willamette (now Sulzer Pumps) – Used (but not obsolete) transformers (solid) and oil circuit breakers (solid)
- **Calbag Metals** – Scrap metal (solid), empty aerosol cans (solid), and obsolete cables (solid)
- Cascade General Inc – Non-hazardous liquid waste/material: mineral oil (liquid) with PCBs < 50 ppm
- **General Electric Company** – Oil with PCBs ≥ 50 ppm (liquid) and obsolete equipment (solid) with trace amounts of PCBs ≥ 50 ppm, used (but not obsolete) transformers (solid)
- **MRP Services** – Vault water
- Northwest Natural Gas Co – Transformer oil (liquid)
- Nudleman & Sons – Scrap copper (solid)
- Oregon Hydrocarbon/TPS Technologies – Solidified contents of USTs (solid) and petroleum hydrocarbon-contaminated soil (solid)
- **Pacific Powervac** – Vault water
- Port of Portland – Used (but not obsolete) transformers (solid) and ballasts (solid)
- Schnitzer Steel – Scrap metal (solid) and empty aerosol cans (solid)
- Tyee Construction Company of Oregon – Transformers (solid)
- Univar – Used transformer/insulating oil (liquid, <1 ppm PCBs), used rags/absorbent material from leaks or spills (solid, <5 ppm PCBs), and used transformer/insulating oil (liquid, ≥ 50 ppm PCBs)
- Western Steel Cast – Transformers (solid)

To the best of PGE's knowledge, after reasonable inquiry, of the companies listed above, Calbag Metals, MRP Services, and Pacific Powervac (highlighted in bold) have received waste from the distribution network. Calbag Metals receives underground cables from the distribution network, after interim storage at the Hawthorne Building. MRP Services and Pacific Powervac have received (vault water) from the distribution network after approximately 2002. For further details, see the response and documents attached for Questions 21 and 39.

General Electric Company was used as a transformer transfer facility by PGE. Since it is likely that this facility received distribution network equipment it is also listed in **bold**, above.

The other (non-bold) companies/persons listed above have historically received and/or currently receive waste and used materials from the PGE waste and used materials handling facilities, which may have included waste and used materials from the distribution network or submerged cables. The Harborton Substation (a historical PGE waste and used materials handling facility) and the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), are within the Investigation Area and are addressed in a separate 104(e) responses. Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal

EPA Question	Response	Records/Information Available
	S7).	
d. in general terms, the nature and quantity of the non- hazardous materials involved in each such arrangement;	See the response to Question 27c.	
e. in general terms, the nature and quantity of any hazardous materials involved in each such arrangement;	See the response to Question 27c.	
f. the owner of the materials involved in each such arrangement, if not Respondent;	Not applicable. PGE was the generator of the waste.	
g. all tests, analyses, analytical results or manifests concerning each hazardous material involved in such transactions;	See the response to Question 27c.	
h. the address(es) for each Property, precise locations at which each material involved in such transactions actually was disposed or treated;	See the response to Question 27a.	
i. the owner or operator of each facility at which hazardous or non-hazardous materials were arranged to be disposed at within the Investigation Area;	See the response to Question 27a.	
j. who selected the location to which the materials were to be disposed or treated;	PGE personnel in charge of environmental matters and consultants. See the response and documents attached for Question 38, as well as the documents attached in response to Question 6g.	See all Question 6 Attachments Also see all Question 38 Attachments
k. who selected the Property as the location at which hazardous materials were to be disposed or treated; and	PGE personnel in charge of environmental matters and consultants. See the response and documents attached for Question 38, as well as the documents attached in response to Question 6g.	See all Question 6 Attachments Also see all Question 38 Attachments
l. any records of such arrangement and each shipment.	See the response to Question 27c.	

EPA Question	Response	Records/Information Available
28. Describe the plants and other buildings or structures where Respondent carried out its operations at each Property within the Investigation Area (excluding locations where ONLY clerical/office work was performed).	The distribution network is comprised of numerous structures (e.g., poles, towers, and vaults) which support power transmission. The submerged cables are anchored to underground vaults on either side of the river.	
29. Provide a schematic diagram or flow chart that fully describes and/or illustrates the Respondent's operations on each Property.	Distribution Network: Current and historical operations related to the distribution network include: installation and maintenance of poles, lines, vaults, underground cables, and transformers; spill response; periodic removal of water accumulated in vaults; replacement or removal of the poles, lines, vaults, underground cables, and transformers as needed; and power transmission (unmanned). Submerged Cables: Current and historical operations related to the submerged cables include: installation and repair of the cables. The cables do not require periodic inspections or maintenance. Once laid, PGE conducts no activities related to the cables unless malfunctions occur. See the attached documents (Q29_Lifecycle.pdf and Q29_Operations-Waste Schematic.pdf) and the document (Q21c_Vault Water Disposal Flow Chart.pdf) attached in response to Question 21c.	Question 29 Attachments Q29_Lifecycle.pdf Q29_Operations-Waste Schematic.pdf Also see Question 21 Attachment Q21c_Vault Water Disposal Flow Chart.pdf
30. Provide a brief description of the nature of Respondent's operations at each location on each Property including:	PGE's operation related to the distribution network and submerged cables is power transmission.	
a. the date such operations commenced and concluded; and	Distribution Network: The distribution network has been in use since prior to PGE's foundation (1930) by PGE predecessor companies (e.g., Portland Railway, Light, & Power Company and Portland Electric Power Company) and continues to the present. The distribution network has been altered, supplemented, expanded, and upgraded over time . Submerged Cables: The submerged cables were installed at various times beginning prior to 1906 and continuing until the most recent installations in 1997. Individual submerged cables remain in use until they fail and/or are removed from service. See the document (Q13e_Sub. Cable Characteristics Table.pdf) attached in response to Question 13e. For further details, see the response to Question 13k.	See Question 13 Attachment Q13e_Sub. Cable Characteristics Table.pdf
b. the types of work performed at	Distribution Network:	See all Question 29 Attachments

EPA Question	Response	Records/Information Available
each location, including but not limited to the industrial, chemical, or institutional processes undertaken at each	Activities include power transmission, operation of equipment, inspection of equipment, minor painting, reconfiguration of equipment, and upgrade of equipment components. Equipment maintenance activities are limited to equipment replacement or upgrades, as needed, including transformers, electrical lines, and underground cables. Equipment repairs are not performed in the field. Instead, equipment is taken out of service and transported to a PGE waste and used materials handling facility for repairs and retrofitting (currently at the transformer shop at PSC). Construction activities may include excavation for footings, installation/replacement/removal of equipment, and wiring. See the documents (Q29_Lifecycle.pdf and Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Spill clean up activities may include surface cleaning, soil/vegetation removal, or surface water pumping. Submerged Cables: Activities/operations related to the submerged cables include: installation and repair of the cables. The cables do not require periodic inspections or maintenance. Once laid, PGE conducts no activities related to the cables unless malfunctions occur.	
31. If the nature or size of Respondent's operations changed over time, describe those changes and the dates they occurred.	Distribution Network: The various portions of the distribution network were constructed, installed, or acquired by PGE at various times, including acquisition/construction/installation by PGE predecessor companies prior to 1930, acquisition/construction/installation by PGE after 1930, and acquisition from Pacific Power & Light (now PacificCorp) in 1972; see the responses to Questions 7 and 13k for further details. The distribution network has been altered, supplemented, expanded, and upgraded over time. Operations have remained substantially the same over time. Submerged Cables: Submerged cables were installed, repaired, and/or removed by PGE at various times from the early 1900s to 1997. There are no ongoing operations associated with the submerged cables. Individual submerged cables remain in use until they fail and/or are removed from service. Repairs have occurred as needed. See the document (Q13e_Sub. Cable Characteristics Table.pdf) attached to Question 13. For additional information see the response and attachments provided for Question 13.	See all Question 13 Attachments
32. List the types of raw materials used in Respondent's operations, the products manufactured, recycled, recovered, treated, or otherwise processed in these operations.	Distribution Network and Submerged Cables: No raw materials are/were used in the routine operation of the distribution network and submerged cables. No products are/were manufactured, recycled, recovered, treated, or processed during operation. Spill clean up entails the use of absorbent materials. For distribution network maintenance waste, see the response to Question 21.	

EPA Question	Response	Records/Information Available
33. Provide copies of Material Safety Data Sheets (MSDS) for materials used in the Respondent's operations.	Many of the products/materials currently used at PGE properties within Oregon are listed in the attached document (Q33_EMC List.pdf). Material Safety Data Sheets (MSDS) for the products/materials used by PGE within Oregon, including in maintaining the distribution network, are provided in a supplemental submittal (Supplemental Submittal S2). Products/materials used in the past are similar to those used currently.	Question 33 Attachment Q33_EMC List.pdf
34. Describe the cleaning and maintenance of the equipment and machinery involved in these operations, including but not limited to:	Distribution Network: Maintenance Activities: Maintenance activities on oil-filled equipment in the distribution network are not performed in the field. Malfunctioning oil-filled equipment is placed in leak-proof plastic bags, placed in metal trays, and then transported directly to a PGE waste and used materials handling facility (currently at the transformer shop at PSC). Cleaning Activities: Cleaning activities along the distribution network are limited to spill response clean up. Spill response includes surface cleaning (e.g., of sidewalks, transformer pads, cars, etc.), removal (e.g., of soil, gravel, or vegetation), and pumping (e.g., of surface water or storm drains). Submerged Cables: Following installation, the submerged cables do not require maintenance, inspections, or cleaning unless a malfunction occurs. The absence of ongoing maintenance is described in the attached document (Q34_Maintenance Files for Cable.pdf). This document is part of the correspondance surrounding the allocation of repair costs due to the 1988 cable break. Please see the response and documents for Question 29, and the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a.	Question 34 Attachment Q34_Maintenance Files for Cable.pdf Also see Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see all Question 29 Attachments
a. the types of materials used to clean/maintain this equipment-machinery;	The primary materials that may have been used for equipment maintenance at the PGE waste and used materials handling facility (currently at the transformer shop at PSC) include transformer oil, solvents, denatured alcohol, degreasers, lubricating grease, hydraulic fluid, and paint.	
b. the monthly or annual quantity of each such material used.	To the best of PGE's knowledge, after reasonable inquiry, no detailed logs of exact quantities of maintenance materials used or oil/routine maintenance waste generated at the PGE waste and used materials handling facility (currently at the transformer shop at PSC) from distribution network repairs are available.	
c. the types of materials spilled in Respondent's operations;	Materials potentially spilled during operations include oil and fluid from equipment spills or leaks.	
d. the materials used to clean up those spills;	The following are PGE general spill response procedures. • Minor equipment spills or leaks are cleaned up using sorbent materials. • Major spills are cleaned up using sorbent materials, berms, and necessary equipment. For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills	See all Question 19 Attachments Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf

EPA Question	Response	Records/Information Available
	2008.pdf) attached for Question 21. The mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred in association with the distribution network or submerged cables.	
e. the methods used to clean up those spills; and	Minor equipment spills or leaks are cleaned up as needed by wiping up the oil/fluid with on-hand sorbent materials. Major spills are immediately reported to the System Control Center. PGE's spill response crew is dispatched to clean up the oil. Soiled materials are placed into a marked barrel and disposed of properly. For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills 2008.pdf) for Question 21. The mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred in association with distribution network or submerged cables. To the best of PGE's knowledge, after reasonable inquiry, all documented releases since 1979 (the year in which PGE initiated its spill reporting system and database) are compiled and summarized in the document (Q62_Miscellaneous Spill Table.pdf) attached in response to Question 62. The figure (Q62_Spills & Damaged Equip.pdf) attached in response to Question 62 shows the approximate location of document releases since 1979. For further details on spills and releases, see the response and documents attached for to Question 62.	See all Question 19 Attachments Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf Also all Question 62 Attachments
f. where the materials used to clean up those spills were disposed of.	Materials potentially contaminated with PCBs are sealed in barrels and transferred to PGE's waste and used materials handling facility (historically at Harborton Substation, Sellwood Substation, or PSC; currently at PSC). If not ascertainable from testing the equipment generating the spill, these wastes are tested to determine a disposal location appropriate for its PCB concentration once they are received at the waste and used materials handling facility. Materials containing PCBs are disposed at different facilities depending on the concentration of the originally spilled materials, if known, or the concentration in the waste materials. Materials containing PCBs may be temporarily stored at one of PGE's waste and used materials handling facilities (historically at Harborton Substation, Sellwood Substation, or PSC; currently at PSC) prior to disposal. Wastes not contaminated with PCBs are containerized separately and transferred to PGE's waste and used materials handling facility (historically at Harborton Substation, Sellwood Substation, or PSC; currently at PSC) for interim storage prior to disposal. For further details, see the response and documents for Question 21.	See all Question 21 Attachments
35. Describe the methods used to clean up spills of liquid or solid materials during Respondent's operation.	Minor spills or leaks are cleaned up as they occur. The fluid is wiped up with on-hand sorbent materials. Major spills are immediately reported to the PGE System Control Center. PGE's spill response crew is dispatched to clean up the oil. Soiled material is placed into a marked barrel and disposed of properly. For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills 2008.pdf) attached for Question 21. The mercury spill cleanup guide is a general PGE guidance	See all Question 19 Attachments Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf

EPA Question	Response	Records/Information Available
	and does not imply that mercury spills have ever occurred in association with the distribution network or submerged cables.	
36. For each type of waste (including by-products) from Respondent's operations, including but not limited to all liquids, sludges, and solids, provide the following information: a. its physical state; b. its nature and chemical composition; c. its color; d. its odor. e. the approximate monthly and annual volumes of each type of waste (using such measurements as gallons, cubic yards, pounds, etc.); and f. the dates (beginning & ending) during which each type of waste was produced by Respondent's operations.	Distribution Network: PGE operational waste varies month to month and year to year. The following is a summary of the type of wastes generated from the historical and current operations along the distribution network. General materials/wastes not contaminated with PCBs include: • Solvents – liquid, oil-based chemical solvents, petroleum hydrocarbon smell, unknown quantity, early 1900s-present • Scrap metal – solid, metallic (e.g., steel), none to metallic odor, unknown quantity, early 1900s-present • Light bulbs – solid, incandescent and fluorescent light bulbs, no odor, unknown quantity, early 1900s-present • General garbage – mixed composition, various colors, various odors, unknown quantity, early 1900s-present • Construction debris – mixed composition, various colors, various odors, unknown quantity, early 1900s-present • Soils removed during excavation for equipment/building demolition/installation – solid, soil, brown, organic odor, unknown quantity, early 1900s-present • Water removed from vaults – liquid, water, clear to turbid, no odor to sewage odor, unknown quantity, early 1900s-present • Used/excess lubricants, oils, and other fluids – liquid, petroleum hydrocarbons, various, petroleum hydrocarbon odor, unknown, early-mid 1990s • Obsolete equipment (e.g., transformers, capacitors) – solid, metal, metallic/petroleum hydrocarbon odor, unknown quantity, early-mid 1990s • Used wire and cable – solid, metal, metallic/petroleum hydrocarbon odor,, unknown quantity, early 1900s-present • Rags used to clean equipment – solid, fabric material, various, alcohol-petroleum hydrocarbon odor, unknown quantity, early-mid 1990s • Absorbents used to clean up leaks or spills – solid, absorbent material, various, petroleum hydrocarbon odor, unknown quantity, early-mid 1990s • Ballasts – solid, metallic, electrical lamp component, various, no odor, unknown quantity, early-mid 1990s General materials/wastes potentially contaminated with PCBs (after 1929, the earliest generalized marketing of PCBs in the United States) include: • Used/excess lubricants, oils, and other fluids – liquid, petroleum hydrocarbons, various, petroleum hydrocarbon odor, unknown quantity, mid 1900s-present • Obsolete equipment (e.g., transformers, capacitors) – solid, metal, metallic/petroleum hydrocarbon odor, unknown quantity, mid 1900s-present • Used potheads – solid, metal, metallic/petroleum hydrocarbon odor, unknown	See all Question 15 Attachments Also see all Question 21 Attachments Also see Question 33 Attachment Q33_EMC List.pdf Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf Also see all Question 62 Attachments

EPA Question	Response	Records/Information Available
	quantity, mid 1900s-present • Rags used to clean equipment – solid, fabric material, various, alcohol-petroleum hydrocarbon odor, unknown quantity, mid 1900s-present • Absorbents used to clean up leaks or spills – solid, absorbent material, various, petroleum hydrocarbon odor, unknown quantity, mid 1900s-present • Ballasts – solid, metallic, electrical lamp component, various, no odor, unknown quantity, mid 1900s-present • Soils removed in response to spills or leaks – solid, petroleum hydrocarbon- and PCB-contaminated soil, black, petroleum hydrocarbon-sweet odor, unknown quantity, mid 1900s-present • Water removed from vaults – liquid, PCB contaminated water, clear to turbid, no odor, unknown quantity, mid 1900s-present • Vault solids – solid, various colors, unknown odor, unknown quantity, mid 1900s-present Also see the MSDS documents provided in a supplemental submittal (Supplemental Submittal S2), and the responses and documents for Questions 21, 33, and 62. Also see the separate 104(e) response for Harborton (historically at PGE waste and used materials handling facility), the separate 104(e) response for the Hawthorne Building (receives underground cables and potheads from the distribution network for interim storage), and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network or submerged cables (Supplemental Submittal S7). Submerged Cables: The submerged cables do not produce routine wastes. The only wastes associated with submerged cables would occur in the event that the cables are damaged. Spliced-out sections of damaged cable are disposed of, as needed.	
37. Provide a schematic diagram that indicates which part of Respondent's operations generated each type of waste, including but not limited to wastes generated by cleaning and maintenance of equipment and machinery and wastes resulting from spills of liquid materials.	See the response and documents for Question 29, as well as the document (Q21a_Waste Stream Summary) attached in response to Question 21a.	See Question 21 Attachment Q21a_Waste Stream Summary Also see all Question 29 Attachments
38. Identify all individuals who currently have and those who have had responsibility for Respondent's environmental matters (e.g.	See the attached documents for a listing of those responsible for environmental matters 1980 - present. See the attached 1993 and 1997 Job Descriptions for Environmental Services Manager. See the attached document for management structural information 1982-2008. Also see the documents attached in response to Question 6g.	Question 38 Attachments Q38_Res. For Environmental Matters.pdf Q38_Mgr. Env. Svc. Job description – 1993.pdf Q38_Mgr. Env. Svc. Job description – 1997.pdf Q38_HRIS Structure Info. 1982-2008-4.0.pdf

EPA Question	Response	Records/Information Available
responsibility for the disposal, treatment, storage, recycling, or sale of Respondent's wastes). Also provide each individual's job title, duties, dates performing those duties, supervisors for those duties, current position or the date of the individual's resignation, and the nature of the information possessed by such individuals concerning Respondent's waste management.		Also see all Question 6 Attachments
39. For each type of waste describe Respondent's contracts, agreements or other arrangements for its disposal, treatment, or recycling.	In general terms, waste and used materials are/were transferred directly to the disposal facility, or transferred to the Hawthorne Building (only underground cables and potheads) or one of PGE's waste and used materials handling facilities for interim storage prior to disposal/recycling/destruction. Historically, PGE's waste and used materials handling facilities were Harborton Substation, Sellwood Substation, PSC, or Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and used materials handing facilities are PSC or Wilsonville (only soil/gravel with < 50 ppm PCBs). PGE's underground cable crews use the Hawthorne Building as interim storage for underground cables and potheads. Currently, new power poles are typically pre-treated by the manufacturer with PCP. Historically, power poles have been made of untreated cedar poles or other wood pre-treated by the manufacturer with PCP, creosote, or other common wood preservatives. Currently obsolete wooden utility poles are cut to separate the heavily pre-treated lower end from the less pre-treated upper end. The lower ends are consolidated at the Harborton pole yard and then disposed of at the Hillsboro Landfill. The upper ends are given away to the public for a variety of non-PGE uses. The attached document (Q39_Notice to Public.pdf) is posted at the obsolete pole pickup site at Harborton pole yard. Vault water and solids (e.g., sludge) found in underground vaults are handled in different ways depending on their potential for contamination. Removal of materials in underground vaults is described in the document (Q29_Operations-Waste Schematic.pdf) attached in response to Question 29 and summarized below: • Vault water that appears clean is pumped to the nearest stormwater sewer or ditch. Only the minimum amount of water necessary to perform the work is pumped from the vault. • Vault water that appears to contain oil is handled by PGE's spill response crew. Spill response procedures are described in the documents attached to Question 19. Water is vacuumed from the vault and transported to Wilsonville Line Center where the solids (sludge and leaves) are separated from vault water using a dewatering box. Both water and solids are tested prior to disposal at an appropriate facility. • Vault water that appears to contain sewage is handled by a contractor. Currently	Question 39 Attachments Q39_Notice to Public.pdf Q39_Pacific Power Vac PO.pdf Q39_NRC POs 2004 to 2009.pdf Q39_MRP POs 2004 to 2009.pdf Also see all Question 19 Attachments Also see all Question 21 Attachments Also see Question 29 Attachment Q29_Operations-Waste Schematic.pdf Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf

EPA Question	Response	Records/Information Available
	Pacific Powervac, MRP Services, or NRC Environmental Services provide these services. The contractor removes the water from the vault and takes it to water treatment systems at Pacific Powervac or MRP Services in Portland, Oregon. After treatment and testing, the water is discharged to the City of Portland sanitary sewer under permit. See the attached contract documents (Q39_Pacific Power Vac PO.pdf, Q39_NRC POs 2004 to 2009.pdf, and Q39_MRP POs 2004 to 2009.pdf) for the vault water removal contractors used along the distribution network. Waste disposal permits are attached in response to Question 52. General PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the Harborton 104(e) response (a historical PGE waste and used materials handling facility), the Hawthorne Building 104(e) response (temporarily stores underground cables and potheads from the distribution network), the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).	
40. Provide copies of such contracts and other documents reflecting such agreements or arrangements, including but not limited to: a. state where Respondent sent each type of its waste for disposal, treatment, or recycling; b. identify all entities and individuals who picked up waste from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be called "Waste Carriers" for purposes of this Information Request); c. if Respondent transported any of its wastes away from its operations, please so indicate; d. for each type of waste specify which Waste Carrier picked it up; e. indicate the ultimate disposal/recycling/treatment location for each type of waste.	In general terms, waste and used materials are/ historically transferred directly to the disposal facility, or to the Hawthorne Building (only underground cables and potheads) or one of PGE's waste and used materials handling facilities for interim storage. Historically, PGE's waste and used materials handling facilities were Harborton Substation, Sellwood Substation, PSC, or Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and used materials handling facilities are PSC or Wilsonville (only soil/gravel with < 50 ppm PCBs). PGE's underground cable crews use the Hawthorne Building as interim storage for underground cables and potheads. To the best of PGE's knowledge, after reasonable inquiry, those companies/persons with whom PGE currently has arrangements for disposal/recycling/destruction of wastes and/or used material are listed in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. The document summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal facility. To the best of PGE's knowledge, after reasonable inquiry, all companies/persons with whom PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for PGE properties in Oregon are listed in the attached document (Q40_Waste-Materials Receivers and Carriers.pdf). The following describes the current waste and used material arrangements at PSC, which would have been similar to the historic waste arrangements at Harborton Substation, Sellwood Substation, and PSC (although it is likely that different contractors/service providers were historically utilized). • Earth Protection Services, Inc. (EPSI) recycles a variety of recyclable waste and used materials from PSC (e.g., ballasts, batteries, and mercury containing articles). New	Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf Also see all Question 21 Attachments Also see Question 27 Attachment Q27_Waste-Materials Receivers within IA.pdf Also see Question 39 Attachments Q39_Notice to Public.pdf Q39_Pacific Power Vac PO.pdf Q39_NRC POs 2004 to 2009.pdf Q39_MRP POs 2004 to 2009.pdf Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf

EPA Question	Response	Records/Information Available
f. provide all documents indicating the ultimate disposal/recycling/treatment location for each type of waste; and	empty containers are exchanged for the filled containers. If there are any concerns about the integrity of the new containers or any other concerns, PGE's Environmental Services (which processes all EPSI invoices) is called to ensure that the vendor promptly corrects the problem. EPSI is a nationally recognized recycling vendor. • Used transformer/insulating oil (< 1 ppm PCBs) is recycled in house by PGE, by Univar USA Inc. or Transformer Technologies. • Univar picks up and transports used transformer/insulating oil (≥ 50 ppm PCBs) to either Clean Harbors Deer Park or to Clean Harbors Aragonite. In addition, Univar picks up and transports used rags and absorbent material (≥ 50 ppm PCBs) to Arlington Landfill. • Oil-filled obsolete transformers and other electrical equipment (< 50 ppm PCBs) are transported to Transformer Technologies. Oil-filled obsolete transformers and other electrical equipment (≥ 50 ppm PCBs) are sent to either Clean Harbors Deer Park or Clean Harbors Aragonite for incineration. Oil-filled ballasts (> 1 ppm PCBs) are sent to Arlington Landfill or Clean Harbors Deer Park. • Used rags and absorbent material (1 to 50 ppm PCBs) are picked up by NRC Environmental Services and transported to Columbia Ridge Landfill.	
g. state the basis for and provide any documents supporting the answer to the previous question.	• Used transformer/insulating oil (1 to 50 ppm PCBs) is picked up by Transformer Technologies and is incinerated by Transformer Technologies or recycled at Environmental Management of Kansas City. • Non-PCB containing used oil (e.g., hydraulic fluids, compressor oil, and motor oil), used oil filters, and used antifreeze from the maintenance shop are collected in labeled 55-gallon drums and recycled or used for energy recovery by Thermo Fluids. • All parts washers are maintained under license by Safety Kleen which performs monthly service calls. Safety Kleen recycles all used non-hazardous solvents and brake solution, processing the solvent and brake solution for reuse. • Aerosol can drainings are collected in industry standard aerosol can puncturing devices. At PSC and other service centers, punctured cans are recycled by CalBag Metals Recycling (non-ferrous metal) or Schnitzer Steel (ferrous metal). When the drums are near full, they are sampled by a licensed laboratory to help characterize the waste prior to collection. Other non-PCB-contaminated scrap metal is also recycled by CalBag Metals Recycling (non-ferrous metal) or Schnitzer Steel (ferrous metal). • Hazardous solvents and paint drainings from aerosol cans are picked up by Veolia Environmental Services and incinerated at Clean Harbors Deer Park.	

EPA Question	Response	Records/Information Available
	• Non-PCB-contaminated used equipment parts (e.g., gaskets, hoses, and air filters), auto parts (brake pads, belts, and air filters), and general trash are picked up by Waste Management and transported to various Waste Management landfills. • Drained obsolete equipment (< 50 ppm PCBs) is recycled by Coleman Metals and drained obsolete equipment (50 to 500 ppm PCBs) is disposed of at Arlington Landfill. The following describes the current waste and used materials arrangements at the Hawthorne Building, which would have been similar to the historic waste arrangements at this building (although it is likely that different contractors/service providers were historically utilized): • Underground cables from the distribution network are collected (interim storage), transported, and recycled by Calbag Metals. • Potheads from the distribution network are collected (interim storage), transported to PSC for interim storage and further consolidation, and transported and disposed at Arlington at an appropriate landfill, depending on PCB content. Soil and gravel removed during excavations (from upgrades, spill response, or remediation) are tested and disposed of appropriately depending on PCB content and/or the presence of petroleum by-products. The soil and gravel are either transported directly from the distribution network to the disposal facility or are transported to Wilsonville (only soil/gravel with < 50 ppm PCBs) and/or PSC for interim storage before bulk disposal at a location dependant upon PCB-content. Obsolete wooden utility poles are separated into the more heavily pre-treated lower end and the less pre-treated upper end. The lower ends are consolidated at the Harborton pole yard and then disposed of at the Hillsboro Landfill. The upper ends are stored at the Harborton pole yard until they are given away to the public for a variety of non-PGE uses. The document (Q39_Notice to Public.pdf) attached in response to Question 39 is posted at the obsolete pole pickup site at Harborton pole yard. Between 1996 and 2002, PGE discharged filtered vault water to the City of Portland sanitary sewer at PSC. PGE pumped, transported, and disposed of this water. Documents describing the water volumes, filtration, testing, and approved disposal are attached to the separate 104(e) response for Harborton. Since 2002, water and debris (e.g., sludge, leaves) removed from underground vaults are handled in different ways depending on its likelihood of contamination. Handling of the removed underground vault materials is generally described by the document (Q21a_Vault Water Disposal Flow Chart.pdf) attached in response to Question 21a and disposal of these materials is more specifically described by the document (Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Vault water that appears to contain sewage is removed and disposed of by one of several contractors (i.e., NRC Environmental Services, Pacific Powervac, or MRP	

EPA Question	Response	Records/Information Available
	Services). Vault water that appears to contain oil is handled by PGE's spill response crew according to the spill response procedures described in the documents attached to Question 19. The spill response crew generally transports the water and solids it recovers to Wilsonville Line Center where they are discharged to a dewatering box. Water and sludge periodically collected from the dewatering box are tested and appropriately disposed of. See the contract documents (Q39_Pacific Power Vac PO.pdf, Q39_NRC POs 2004 to 2009.pdf, and Q39_MRP POs 2004 to 2009.pdf) attached to Question 39 for vault water removal contractors used along the distribution network. Waste disposal permits are attached in response to Question 52. Also see the response and document attached for Question 27. General PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the Harborton 104(e) response (historically a PGE waste and used materials handling facility within the Investigation Area), the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).	
41. Describe all wastes disposed by Respondent into Respondent's drains including but not limited to:	To the best of PGE's knowledge, after reasonable inquiry, the only waste associated with the distribution system and submerged cables that has been discharged into PGE drains is vault water.	
a. the nature and chemical composition of each type of waste; b. the dates on which those wastes were disposed; c. the approximate quantity of those wastes disposed by month and year;	Stormwater that accumulates in vaults may periodically need to be removed in order to perform maintenance, thereby generating waste. The chemical composition of vault water varies and it may contain chemicals related to normal vehicular traffic, oil from illegal dumping, transformer oil from malfunctioning equipment, or sewage from nearby leaking pipes. Debris (e.g., sludge and leaves) may also be present in vaults and often has a chemical composition that corresponds to that of the vault water. Prior to disposal, any vault water or debris generated is evaluated for potential contamination and tested if necessary to determine an appropriate disposal facility. Between 1996 and 2002, PGE discharged approximately 41,500 gallons of filtered vault water to the City of Portland sanitary sewer at PSC. This water was pumped from the vaults, transported to Harborton Substation, filtered, and then transported to PSC for disposal. Documents describing the water volumes, filtration, testing, and approved disposal are attached to the separate 104(e) response for Harborton. Since 2002, water and debris (e.g., sludge, leaves) removed from underground vaults are handled in different ways depending on its likelihood of contamination. Handling of the removed underground vault materials is generally described by the document (Q21a_Vault Water Disposal Flow Chart.pdf) attached in response to Question 21a and disposal of these materials is more specifically described by the document (Q29_Operations-Waste Schematic.pdf)	

EPA Question	Response	Records/Information Available
	attached in response to Question 29. To the best of PGE's knowledge, after reasonable inquiry, additional information on the dates and quantities of vault water and debris disposed of are unknown.	
d. the location to which these wastes drained (e.g. septic system or storage tank at the Property, pre-treatment plant, Publicly Owned Treatment Works (POTW), etc.); and	Between approximately 1995/1996 and 2002, treated (filtered) vault water was discharged by PGE to the City of Portland sanitary sewer at PSC. This sewer drains to the Columbia Boulevard Wastewater Treatment Plant located at 5001 N Columbia Boulevard in Portland, Oregon. Currently, vault water that appears to contain sewage is collected by contractors, treated by contractor-owned treatment systems, and discharged by the contractors under permit to the City of Portland sanitary sewer.	
e. whether and what pretreatment was provided.	Between approximately 1995/1996 and 2002, vault water was pumped from underground vaults, filtered at Harborton Substation, tested, and discharged under permit to the City of Portland sanitary sewer at PSC. Currently, vault water that appears to contain oil is handled by PGE's spill response crew. The vault water solids are removed from the vault water using a dewatering box located at Wilsonville Line Center. Water and solids removed from the dewatering box are tested prior to disposal. No other pretreatment is performed. Vault water that appears to contain sewage is removed and disposed of by one of several contractors (i.e., NRC Environmental Services, Pacific Powervac, or MRP Services). The vault water collected by contractors is treated by contractor-owned treatment systems and discharged under permit to the City of Portland sanitary sewer.	
42. Identify any sewage authority or treatment works to which Respondent's waste was sent.	Between approximately 1995/1996 and 2002, treated vault water was discharged to the City of Portland sanitary sewer at PSC. This sewer drains to the Columbia Boulevard Wastewater Treatment Plant located at 5001 N Columbia Boulevard in Portland, Oregon. Currently, vault water that appears to contain sewage is collected by contractors, treated by contractor-owned treatment systems, and discharged by the contractors under permit to the City of Portland sanitary sewer. Based on the locations of the contractors' facilities, treated water from the facilities is probably sent to the Columbia Boulevard Wastewater Treatment Plant in Portland, Oregon. Please refer to the response to Question 62 for a description of spills within the distribution network.	
43. Describe all settling tank, septic system, or pretreatment system sludges or other treatment wastes resulting from Respondent's operations.	To the best of PGE's knowledge, after reasonable inquiry, the only current settling tank or septic system associated with the distribution network or submerged cables is the dewatering box for vault water located at the Wilsonville Line Center. This dewatering box is used to settle out solids suspended in vault water prior to testing and appropriate disposal. Currently, vault water collected by contractors is treated via contractor-owned treatment systems and discharged by the contractor under permit to the City of Portland sanitary sewer.	

EPA Question	Response	Records/Information Available
	Between approximately 1995/1996 and 2002, vault water produced by the distribution network was treated by PGE with a filtration system prior to being discharged to the sanitary sewer at PSC. The filtration system produced used filters and granular activated carbon. See the separate Harborton 104(e) response for more information.	
44. If applicable, describe the facilities, processes and methods Respondent or Respondent's contractor used, and activities engaged in, either currently or in the past, related to ship building, retrofitting, maintenance or repair, including, but not limited to, dry-docking operations, tank cleaning, painting and re-powering.	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities pertaining to PGE's distribution network or submerged cables.	
45. Describe any hazardous substances, wastes, or materials used or generated by the activities described in response to the previous Question and how these hazardous substances, materials and wastes were released or disposed of.	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities pertaining to PGE's distribution network or submerged cables.	
46. Provide copies of any records you have in your possession, custody or control relative to the activities described in response to the previous two Questions.	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities pertaining to PGE's distribution network or submerged cables.	
47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated biphenyl(s) "PCB(s)" or PCB(s)-containing materials or liquids.	In general, PGE replaces PCB-containing or potentially PCB-containing equipment (e.g., transformers, capacitors, lamp ballasts, circuit breakers, bushings, and step regulators) with non-PCB oil containing equipment (< 50 ppm PCBs) as they are removed from service. The primary materials that may have been used for equipment maintenance include dielectric fluids (oil) and transformer oil, which may have historically contained PCBs. To the best of PGE's knowledge, after reasonable inquiry, electrical equipment maintenance is limited to equipment replacement or upgrades, as needed, including transformers, electrical lines, and underground cables. Equipment repairs are not performed in the field. Instead,	See Question 4 Attachment Q04_Dist. Network Transformers.pdf Also see Question 21 Attachments Q21a_PGE Owned & Operated Transformer Table.pdf Q21a_Leased Transformer Table.pdf Q21a_1981 Transformers at Food Estab.pdf Q21a_Customer Owned Transformer Table.pdf

EPA Question	Response	Records/Information Available
	equipment is taken out of service and transported to a PGE waste and used materials handling facility for repairs and retrofitting (currently at the transformer shop at PSC). Older underground PILC cables and potheads potentially contain PCBs. Newer underground cables are constructed of EPR and do not contain oil. The document (Q21a_PGE Owned & Operated Transformer Table.pdf) attached in response to Question 21 lists the PGE-owned, oil-filled distribution equipment currently connected to the distribution lines within the Investigation Area. The document (Q21a_Leased Transformer Table.pdf), also attached in response to Question 21, lists the leased, oil-filled equipment currently within the Investigation Area. And the document (Q21a_Customer Owned Transformer Table.pdf), also attached in response to Question 21) lists the customer-owned, oil-filled equipment currently within the Investigation Area that are listed in the distribution network database. However, there likely are other customer-owned, oil-filled transformers and equipment within the Investigation Area that are not in PGE's database. To the best of PGE's knowledge, after reasonable inquiry, these documents identify the location, serial number, year manufactured, detected PCB concentrations and the date tested for PCBs, and oil volume of transformers in the distribution network. The figure (Q04_Dist. Network Transformers.pdf) attached in response to Question 4 shows the location of these transformers. See the document (Q21a_1981 Transformers at Food Estab.pdf) attached in response to Question 21a for a list of oil-filled equipment located at food establishments within the distribution network in 1981. See the documents (Q29_Lifecycle.pdf and Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Also see the revised annual PCB reports (1978-2008) for PGE (all PGE sites combined), which are provided in a supplemental submittal (Supplemental Submittal S3). To the best of PGE's knowledge, after reasonable inquiry, all documented releases within the Investigation Area since 1979 (the year in which PGE initiated its spill reporting system and database) are compiled and summarized in the document (Q62_Miscellaneous Spill Table.pdf) attached in response to Question 62. The figure (Q62_Spills & Damaged Equip.pdf) attached in response to Question 62 shows the approximate location of document releases since 1979. For further information on spills and releases, see the response and documents for Question 62.	Also see Question 29 Attachments Q29_ Lifecycle.pdf Q29_Operations-Waste Schematic.pdf Also see all Question 62 Attachments
48. For each process or activity identified in response to the previous Question, describe the dates and duration of the activity or process and the quantity and type of PCB(s) or PCB(s) containing materials or liquids.		
a. the manufacturer and serial number of each transformer;	The document (Q21a_PGE Owned & Operated Transformer Table.pdf) attached in response to Question 21 lists the PGE-owned, oil-filled distribution equipment currently connected to the	See Question 21 Attachments Q21a_Waste Stream Summary.pdf

EPA Question	Response	Records/Information Available
b. the quantity of oil in each transformer; c. the concentrations of PCB contained in the transformer oil; d. the time period or periods in which these transformers were sent to the Property; e. details about how each transformer was handled or stored or otherwise processed;	distribution lines within the Investigation Area. The document (Q21a_Leased Transformer Table.pdf), also attached in response to Question 21, lists the leased, oil-filled equipment currently within the Investigation Area. And the document (Q21a_Customer Owned Transformer Table.pdf), also attached in response to Question 21) lists the customer-owned, oil-filled equipment currently within the Investigation Area that are listed in the distribution network database. However, there likely are other customer-owned, oil-filled transformers and equipment within the Investigation Area that are not in PGE's database. To the best of PGE's knowledge, after reasonable inquiry, these documents identify the location, serial number, year manufactured, detected PCB concentrations and the date tested for PCBs, and oil volume of transformers in the distribution network. See the document (Q21a_1981 Transformers at Food Estab.pdf.) attached in response to Question 21a for a list of transformers located at food establishments in 1981. Equipment is handled by trained, qualified personnel. Equipment is energized and in service. Obsolete equipment is drained prior to disposal/recycling, if possible. Drained oil is incinerated or recycled, depending on its PCB content. Obsolete equipment may be transferred to a PGE waste and used materials handling facility for interim storage prior to disposal/recycling. The obsolete equipment is incinerated, landfill disposed, or recycled based on PCB content and structural composition. See the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. Some used, but not obsolete, transformers have been sold to other companies/persons. These are documented in the Supplemental Submittal S7 (documentation from facilities that may have received waste and materials from properties within the Investigation Area). Information regarding individual spills within the Investigation Area since 1979 is presented in the document (Q62_Miscellaneous Spill Table.pdf) attached in response to Question 62. This document summarizes the date, source, PCB concentration of spill, and clean up response to the best of PGE's knowledge, after reasonable inquiry. For further details on spills and releases, see the response and documents for Question 62. For further information, see the responses to Questions 21, 27, and 40. Also see the separate 104(e) response for Harborton (historically a PGE waste and used materials handling facility), the separate 104(e) response for the Hawthorne Building (temporarily stores underground cables and potheads), and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	Q21a_PGE Owned & Operated Transformer Table.pdf Q21a_Leased Transformer Table.pdf Q21a_1981 Transformers at Food Estab.pdf Q21a_Customer Owned Transformer Table.pdf Also see all Question 62 Attachments
f. information describing the contractual relationship Respondent had, if any, with owners or users of the respective transformers, including but not limited to, liability for disposal;	The document (Q21a_Leased Transformer Table.pdf) attached in response to Question 21 lists the leased, oil-filled equipment currently within the Investigation Area. See the documents attached in response to Question 7. The attached document (Q21a_Customer Owned Transformer Table.pdf) lists the customer-owned, oil-filled equipment currently within the Investigation Area that are listed in the	See all Question 7 Attachments Also see Question 21 Attachments Q21a_Leased Transformer Table.pdf Q21a_Customer Owned Transformer Table.pdf

EPA Question	Response	Records/Information Available
	distribution network database. However, there likely are other customer-owned, oil-filled transformers and equipment within the Investigation Area that are not in PGE's database. Unless the Distribution Services Department is hired for a specific job, PGE does not provide maintenance of leased or customer-owned transformers.	
g. information on any other oil filled electrical equipment at the Property, and;	Other oil-filled electrical equipment includes the PILC underground cables and potheads. During normal operation, the underground cables remain intact and do not leak. When these cables are weakened (e.g., at a failing splice), punctured, or severed, they may slowly leak small volumes of oil. These releases and resulting cleanup wastes are cleaned up by underground cable maintenance crews. Used/obsolete underground cables and potheads are transported to the Hawthorne Building for consolidation, then transported to a PGE waste and used materials handling facility (currently PSC), and then disposed at an appropriate landfill, depending on PCB content.	
h. complete copies of any contracts, invoices, receipts, or other documents related to the transformers or other oil filled electrical equipment to the Property.	The current transformer leases are attached in response to Question 7. Unless the Distribution Services Department is hired for a specific job, PGE does not provide maintenance of leased or customer-owned transformers. PGE completes invoices on a job by job basis. The contracts and invoices are not easily searchable or extractable for only those customers within the Investigation Area. Therefore, they are not provided in this response. To the best of PGE's knowledge, after reasonable inquiry, there are no other available contracts, agreements, or other arrangements relating to transformers or other oil-filled electrical equipment specific to the distribution network. Waste disposal permits are attached in response to Question 52. Additional available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the Harborton 104(e) response (a historical PGE waste and used materials handling facility), the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).	See Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf
49. For each process or activity identified in response to the previous two Questions, identify the location of the process or activity on the Property.	The document (Q21a_PGE Owned & Operated Transformer Table.pdf) attached in response to Question 21 lists the PGE-owned, oil-filled distribution equipment currently attached to the distribution lines within the Investigation Area. The document (Q21a_Leased Transformer Table.pdf), also attached in response to Question 21, lists the leased, oil-filled equipment currently within the Investigation Area. And the document (Q21a_Customer Owned Transformer Table.pdf), also attached in response to Question 21) lists the customer-owned, oil-filled equipment currently within the Investigation Area that are listed in the distribution network database. However, there likely are other customer-owned, oil-filled transformers and equipment within the Investigation Area that are not in PGE's database. Transformer locations are depicted on the figures (Q04_Dist. Network Transformers.pdf) attached in response to	See Question 4 Attachment Q04_Dist. Network Transformers.pdf Also see Question 21 Attachments Q21a_PGE Owned & Operated Transformer Table.pdf Q21a_Leased Transformer Table.pdf Q21a_1981 Transformers at Food Estab.pdf Q21a_Customer Owned Transformer Table.pdf

EPA Question	Response	Records/Information Available
	Question 4. Also see the document (Q21a_1981 Transformers at Food Estab.pdf) attached in response to Question 21a for a list of oil-filled equipment located along the distribution network in 1981.	
Section 5.0 - Regulatory Information		
50. Identify all federal, state and local authorities that regulated the owner or operator of each Property and/or that interacted with the owner or operator of each Property. Your response is to address all interactions and in particular all contacts from agencies/departments that dealt with health and safety issues and/or environmental concerns.	The primary federal, state and local agencies that have regulated PGE's distribution network and submerged cables include: • City of Portland (including fire, medical, and police): neighborhood inspections, facility enhancements, temporary permits for street usage • Oregon Department of Environmental Quality (DEQ): product/waste disposal, facility enhancements • U.S. Environmental Protection Agency (USEPA): for Portland Harbor Superfund Site, Resource Conservation and Recovery Act (RCRA), and TSCA • US Army War Department: submerged cable permits • Port of Portland: submerged cable permits • USACE: submerged cable permits • DSL: submerged cable permits Regarding health and safety concerns, interaction with the following agencies would occur as a result of a compliance inspection, a consultation visit or during the course of an accident investigation (contact with the OPUC would occur if an accident of a certain severity occurred): • Federal Occupational Safety and Health Administration (OSHA) • Oregon Occupational Safety and Health Administration (OrOSHA) • Oregon Public Utility Commission (OPUC) • Oregon Department of Transportation (ODOT) • Oregon Department of Energy (ODOE) • Federal Energy Regulatory Commission (FERC) Of these agencies, OrOSHA performed an inspection at SW Ash and SW Front in response to an employee complaint regarding lead exposure during underground cable splicing activities. For further details, see the response and document attached for Question 51. The City of Portland contacted PGE in 1981 about an upcoming replacement of a stormwater pipe. They asked PGE to pay for the additional precautions needed to protect the nearby submerged cable. For more information, see the attached documents (Q50_COP Maintenance Near Cables.pdf, Q50_COP Maintenance Near Cables 2.pdf, and Q50_COP Maintenance Near Cables 3.pdf). To the best of PGE's knowledge, after reasonable inquiry, other than the documents attached, there are no records indicating correspondence or inspections specific to the distribution network or submerged cables by these regulatory agencies.	Question 50 Attachments Q50_COP Maintenance Near Cables.pdf Q50_COP Maintenance Near Cables 2.pdf Q50_COP Maintenance Near Cables 3.pdf Also see Question 52 Attachments Q52_1911-03-21 Letter.pdf Q52_Permits for Laying Cables.pdf Q52_Permit for Telephone Cable.pdf Q52_1996 USACE Permit to Replace Cables.pdf Q52_1996 DSL Removal-Fill Permit.pdf

EPA Question	Response	Records/Information Available
51. Describe all occurrences associated with violations, citations, deficiencies. and/or accidents concerning each Property during the period being investigated related to health and safety issues and/or environmental concerns. Provide copies of all documents associated with each occurrence described.	To the best of PGE's knowledge, after reasonable inquiry, PGE has not had any environmental related violations/citations/deficiencies along the distribution network or submerged cables. For spills/discharges, please see the response to Question 62. PGE maintains a database by worker classification (e.g., substation, linemen, etc) of all OSHA accidents and injuries since May 1978; however, the records are not categorized or searchable by address. The OrOSHA performed an inspection at SW Front Avenue and SW Ash Street in September/October 1985 in response to an employee complaint regarding lead exposure during underground cable splicing activities; see the attached document (Q51_Front and Ash 121986.pdf). The OrOSHA issued a citation for failure to notify employees within five working days in writing of the results of personal monitoring sampling results for lead exposure. A summary of OSHA recordable accidents and injuries potentially associated with the distribution network including dates, event identification, and injury type is provided in the attached document (Q51_Summary of Injury Reports.pdf). This summary is limited to PGE personnel (e.g., linemen, spill response crews, meter readers) who could have been working on the distribution network within the Investigation Area (all names have been removed). For this reason, it does not include reports of administrative personnel or dispatchers. The summary also does not include vehicle accidents. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know exactly where the summarized OSHA reportable accidents/injuries occurred along the distribution network or submerged cables.	Question 51 Attachment Q51_Front and Ash 121986.pdf Q51_Summary of Injury Reports.pdf
52. Provide a list of all local, state and federal environmental permits ever issued to the owner or operator on each Property (e.g., RCRA permits. NPDES permits, etc.). Please provide a copy of each federal and state permit, and the applications for each permit, ever issued to the owner or operator on each Property.	To the best of PGE's knowledge, after reasonable inquiry, PGE has no environmental permits associated with the distribution network. The attached documents (Q52_01.pdf, Q52_02.pdf, and Q52_2009-01-27 Landfill Permit.pdf) are general PGE disposal permits, for which specific contributions from different locations are not indicated. A component of the waste disposed under these permits may have originated from the distribution network and submerged cables. The attached document (Q52_NonHaz Permits for Poles.pdf) provides the disposal permits for obsolete wooden poles in 2008. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the permits that PGE (or a PGE predecessor company) has been granted for the installation and maintenance of the submerged cables: • PGE predecessor companies (Portland Railway, Light, & Power Co and Portland General Electric Company) were granted permits to lay and maintain submerged cables within the vicinity of six bridges (four unspecified bridges, the Steel Bridge, and the Hawthorne Bridge) from the U.S. Army War Department in the early 1900s (pre-1906, 1906, 1910, and 1911); see the attached document (Q52_1911-03-21 Letter.pdf). • In 1926, Portland Electric Power Company (a PGE predecessor company) was granted	Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf Q52_2009-01-27 Landfill Permit.pdf Q52_1911-03-21 Letter.pdf Q52_Permits for Laying Cables.pdf Q52_Permit for Telephone Cable.pdf Q52_1996 USACE Permit to Replace Cables.pdf Q52_1996 DSL Removal-Fill Permit.pdf

EPA Question	Response	Records/Information Available
	permits from the U.S. Army War Department and the Port of Portland to lay and maintain a submerged cable from East Clay Street to Columbia Street; see the attached document (Q52_Permits for Laying Cables.pdf). • In 1938, PGE was granted a permit from the U.S. Army War Department to relocate the East Clay submerged cable upstream of Hawthorne Bridge; see the document attached (Q52_Permits for Laying Cables.pdf). • In 1951, PGE was granted permits from the U.S. Army Corp of Engineers (USACE) and the Port of Portland to lay and maintain a communications cable upstream of Hawthorne Bridge; see the attached document (Q52_Permit for Telephone Cable.pdf). • In 1996, PGE was granted a joint permit from the DSL and the USACE to replace submerged cables located upstream of the Hawthorne Bridge. To the best of PGE's knowledge, after reasonable inquiry, the cables (installed in 1997) were laid in trenches near shore, and laid along the river bottom at mid-channel; see the documents (Q52_1996 USACE Permit to Replace Cables.pdf and Q52_1996 DSL Removal-Fill Permit.pdf) attached in response to Question 52. • To the best of PGE's knowledge, after reasonable inquiry, PGE likely either operated under existing permits, or was granted permits to lay and/or replace the submerged cables installed in the downtown core crossing area (upstream of the Hawthorne Bridge) in 1931, 1944, 1947, and 1950; in the Harborton area in 1945; and in the vicinity of the Sellwood Bridge and St. Johns Bridge (installation dates unknown).	
53. Did the owner or operator ever file a Hazardous Waste Activity Notification under the RCRA? If so, provide a copy of such notification.	To the best of PGE's knowledge, after reasonable inquiry, PGE has not filed a Hazardous Waste Activity Notification under the RCRA for the distribution network or submerged cables. Hazardous wastes and/or materials from the distribution network and submerged cables, if any, have been disposed of after interim storage at a PGE waste and used materials handling facility (i.e., Harborton, Sellwood, or PSC) or the Hawthorne Building. See the 104(e) response for Harborton (a historical PGE waste and used materials handling facility), the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	
54. Did the owner or operator's facility on each Property ever have "interim status" under the RCRA? If so, and the facility does not currently have interim status; describe the circumstances under	Not applicable. PGE did not have "interim status" under RCRA regarding the distribution network or the submerged cables.	

EPA Question	Response	Records/Information Available
which the facility lost interim status.		
55. Provide all RCRA Identification Numbers issued to Respondent by EPA or a state for Respondent's operations.	Not applicable. No RCRA Identification Numbers have been issued to PGE for the distribution network or submerged cables.	
56. Identify all federal offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	To the best of PGE's knowledge, after reasonable inquiry, no hazardous substance or hazardous waste information has been sent to or filed with any federal offices for the distribution network or submerged cables. Hazardous wastes and/or materials from the distribution network and submerged cables, if any, have been disposed of after interim storage at a PGE waste and used materials handling facility (i.e., Harborton, Sellwood, or PSC) or the Hawthorne Building. See the 104(e) response for Harborton (a historical PGE waste and used materials handling facility), the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	
57. Identify all state offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	To the best of PGE's knowledge, after reasonable inquiry, no hazardous substance or hazardous waste information has been sent to or filed with any state offices for the distribution network or submerged cables. Hazardous wastes and/or materials from the distribution network and submerged cables, if any, have been disposed of after interim storage at a PGE waste and used materials handling facility (i.e., Harborton, Sellwood, or PSC) or the Hawthorne Building. See the 104(e) response for Harborton (a historical PGE waste and used materials handling facility), the Hawthorne Building (temporarily stores underground cables and potheads from the distribution network), and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the distribution network (Supplemental Submittal S7).	
58. List all federal and state environmental laws and regulations under which Respondent has reported federal or state governments, including but not limited to: Toxic Substances Control Act, 15 U.S.C. Sections 2601 et seq., (TSCA); Emergency Planning and Community Right-to-Know Act, 42	The federal and state environmental laws and regulations under which PGE has reported include TSCA, Oregon Hazardous Substance Remedial Action Law, Oregon Hazardous Waste and Hazardous Materials Law, and the Oregon Solid Waste Law.	

EPA Question	Response	Records/Information Available
U.S.C. Sections 1101 et seq., (EPCRA); and the Clean Water Act (the Water Pollution Prevention and Control Act), 33 U.S.C. Sections 1251 et seq., Oregon Hazardous Substance Remedial Action Law, ORS 465.315, Oregon Water Quality law, ORS Chapter 468(b), Oregon Hazardous Waste and Hazardous Materials law, ORS Chapters 465 and 466, or Oregon Solid Waste law, ORS Chapter 459. Provide copies of each report made, or if only oral reporting was required, identify the federal and state offices to which such report was made.		
59. Provide a copy of any registrations, notifications, inspections or reports required by the Toxic Substances Control Act, 15 USC § 2601 et seq., or state law, to be maintained or submitted to any government agency, including fire marshal(s), relating to PCB(s) or PCB(s) containing materials or liquids on any Property identified in response to Question 4.	Annual PCB reports (1978-2008) for PGE (all PGE sites combined) are maintained in compliance with record-reporting rule 40 CFR 761 and are provided in a revised supplemental submittal (Supplemental Submittal S3).	
60. Has Respondent or Respondent's contractors, lessees, tenants, or agents ever contacted, provided notice to, or made a report to the Oregon Department of State Lands ("DSL") or any other state agency concerning an incident, accident, spill, release, or other event involving Respondent's leased state aquatic lands? If so, describe each incident, accident, spill, release, or other event	To the best of PGE's knowledge, after reasonable inquiry, the only contact PGE has had with DSL regarding the distribution network and submerged cables within the Investigation Area was regarding the permit to replace submerged cables located upstream of the Hawthorne Bridge; see the response and document (Q52_1996 DSL Removal-Fill Permit.pdf) attached for Question 52 for further information.	See Question 52 Attachment Q52_1996 DSL Removal-Fill Permit.pdf

EPA Question	Response	Records/Information Available
and provide copies of all communications between Respondent or its agents and DSL or the other state agency and all documents that were exchanged between Respondent, its agents and DSL or other stale agency.		
61. Describe all notice or reporting requirements to DSL that you had under an aquatic lands lease or state law or regulation regarding incidents affecting, or activities or operations occurring on leased aquatic lands. Include the nature of the matter required to be reported and the office or official to whom the notice or report went to. Provide copies of all such notices or reports.	In 1996, PGE obtained permits from the USACE and DSL for the replacement of submerged cables upstream of the Hawthorne Bridge. Prior to that, authorization for the placement of the submerged cables was provided by the USACE, its predecessor agency the US Army War Department, and/or the Port of Portland. For further details, see the response to Question 52.	See Question 52 Attachments Q52_1996 USACE Permit to Replace Cables.pdf Q52_1996 DSL Removal-Fill Permit.pdf
Section 6.0 - Releases and Remediation		
62. Identify all leaks, spills, or releases into the environment of any waste, including petroleum, hazardous substances, pollutants, or contaminants, that have occurred at or from each Property, which includes any aquatic lands owned or leased by Respondent. In addition, identify and provide copies of any documents regarding: a. when such releases occurred; b. how the releases occurred (e.g. when the substances were being stored, delivered by a vendor, transported or transferred (to or from any tanks. drums, barrels, or recovery units). and treated);	To the best of PGE's knowledge, after reasonable inquiry, the attached document (Q62_Miscellaneous Spill Table.pdf) provides information describing the documented leaks, spills, or releases into the environment since 1979 which were not associated with properties addressed in separate 104(e) responses. Approximate locations of these releases are shown on the attached figure (Q62_Spills & Damaged Equip.pdf). Documents for each of these spills are also attached, but not individually listed (see the Question 62 Attachments subfolder entitled "Spill Reports"). These records document 91 releases of transformer oil, hydraulic oil, or diesel that occurred from PGE equipment within the Investigation Area between 1979 and 2008. The causes of these releases varied, and included vehicles or trees contacting power poles or lines; vandals; flooding; fire; and unknown causes. Released volumes ranged from trace amounts to 400-500 gallons, and PCB concentrations ranged from zero to 260 ppm. The attachment (Q62_Miscellaneous Spill Table.pdf) compiles and summarizes records available in the spill reporting database. Prior to the institution of its spill tracking system in 1979, PGE did not track spills. Since compliance with PGE's spill tracking system may have been inconsistent during its early years (1979-1985), PGE supplemented its spill records by consulting equipment maintenance records (which began in 1969) for those indicating repair of damaged	Question 62 Attachments Q62_Miscellaneous Spill Table.pdf Q62_Damaged Equipment Table.pdf Q62_Spills & Damaged Equip.pdf Spill Reports, not individually listed here Damaged Equipment Files, not individually listed here

EPA Question	Response	Records/Information Available
c. the amount of each hazardous substances, pollutants, or contaminants so released;	oil-containing equipment in which oil may have been released. PGE estimates that approximately 10 percent of the damaged equipment records indicating "burned out" or "bad order" (either may be abbreviated "B.O.") equipment may have resulted in a release of oil.	
d. where such releases occurred;	The attached table (Q62_Damaged Equipment Table.pdf) compiles and summarizes the 70 available B.O. damaged equipment records within the Investigation Area, which are a small subset of all equipment repairs in the Investigation Area. Maintenance records for intact oil-containing equipment are not included. Documents providing available additional information for each of these damaged equipment repairs are also attached, but not individually listed; see the Question 62 Attachments subfolder entitled "Damaged Equipment Files". These records provide a rough indication of where spills may have occurred (approximately 10% of the time) during the years of no or inconsistent spill reporting (1968 to 1985). Approximate locations of these damaged pieces of equipment are shown on the attached figure (Q62_Spills & Damaged Equip.pdf).	
e. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release;		
f. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken;		
g. all persons with information relating to these releases; and		
h. list all local, state, or federal departments or agencies notified of the release, if applicable;		
63. Was there ever a spill, leak, release or discharge of waste, including petroleum, or hazardous substances, pollutant or contaminant into any subsurface disposal system or floor drain inside or under a building on the Property? If the answer to the preceding question is anything but an unqualified "no", identify:	Not applicable. There are no buildings associated with the distribution network or submerged cables.	
a. where the disposal system or floor drains were located;		
b. when the disposal system or floor drains were installed;		
c. whether the disposal system or floor drains were connected to pipes;		

EPA Question	Response	Records/Information Available
d. where such pipes were located and emptied;		
e. when such pipes were installed;		
f. how and when such pipes were replaced. or repaired; and		
g. whether such pipes ever leaked or in any way released such waste or hazardous substances into the environment.		
64. Has any contaminated soil ever been excavated or removed from the Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify and provide copies of any documents regarding:	PGE's clean up of releases associated with the distribution network and submerged cables has resulted in the removal and disposal of soil from properties that are not owned or controlled by PGE. Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents summarize information including the date, location, equipment, spill volume, and clean up actions at each spill. For further details on spills and releases, see the response and documents attached for Question 62.	See all Question 62 Attachments
a. amount of soil excavated;		
b. location of excavation presented on a map or aerial photograph;		
c. manner and place of disposal and/or storage of excavated soil;		
d. dates of soil excavation;		
e. identity of persons who excavated or removed the soil, if other than a contractor for Respondent;		
f. reason for soil excavation;		
g. whether the excavation or removed soil contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the soil contained, and why the soil contained such constituents;		
h. all analyses or tests and results of analyses of the soil that was removed from the Property;		

EPA Question	Response	Records/Information Available
i. all analyses or tests and results of analyses of the excavated area after the soil was removed from the Property; and		
j. all persons, including contractors, with information about (a) through (i) of this request.		
65. Have you ever tested the groundwater under your Property? If so, please provide copies of all data, analysis, and reports generated from such testing.	To the best of PGE's knowledge, after reasonable inquiry, groundwater was not tested in response to a release associated with the distribution network or submerged cables.	
66. Have you treated, pumped, or taken any kind of response action on groundwater under your Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify:		
a. reason for groundwater action;		
b. whether the groundwater contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the groundwater contained, and why the groundwater contained such constituents;	To the best of PGE's knowledge, after reasonable inquiry, PGE has not pumped or treated groundwater in response to a release associated with the distribution network or submerged cables.	
c. all analyses or tests and results of analyses of the groundwater;		
d. if the groundwater action has been completed, describe the basis for ending the groundwater action; and		
e. all persons, including contractors, with information about (a) through (c) of this request.		

EPA Question	Response	Records/Information Available
67. Was there ever a spill, leak, release or discharge of a hazardous substance, waste, or material into the Willamette River from any equipment, structure, or activity occurring on, over, or adjacent to the river? If the answer to the preceding question is anything but an unqualified "no", identify:		
a. the nature of the hazardous substance, waste, or material spilled, leaked, released or discharged;	Some releases associated with the distribution network or submerged cables may have resulted in transformer oil containing PCBs migrating to stormwater drains which discharge to the Willamette River. Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents summarize information including the date, location, equipment, spill volume, and clean up actions at each spill. For further details on spills and releases, see the response and documents attached for Question 62.	See all Question 62 Attachments
b. the dates of each such occurrence;		
c. the amount and location of such release;		
d. were sheens on the river created by the release;		
e. was there ever a need to remove or dredge any solid waste, bulk product, or other material from the river as a result of the release? If so, please provide information and description of when such removal/dredging occurred, why, and where the removed/dredged materials were disposed.		
68. For any releases or threatened releases of PCB(s), identify the date, quantity, location and type of PCB(s) or PCB(s) containing materials or liquids, and the nature of any response to or cleanup of the release.	Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents summarize information including the date, location, equipment, spill volume, and clean up actions at each spill. For further details on spills and releases, see the response and documents attached for Question 62.	See all Question 62 Attachments
69. For any releases or threatened releases of PCB(s) and/or PCB(s) containing materials or liquids, identify	Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents	See Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21a_Vault Water Disposal Flow Chart.pdf

EPA Question	Response	Records/Information Available
and provide copies of any documents regarding the quantity and type of waste generated as a result of the release or threatened release, the disposition of the waste, provide any reports or records relating to the release or threatened release, the response or cleanup and any records relating to any enforcement proceeding relating to the release or threatened release. Provide all documentation regarding, but not limited to, the following releases:	summarize the available information regarding documented spills that are not associated with PGE properties addressed in separate 104(e) responses. For further details on spills and releases, see the response and documents attached for Question 62. Soil and gravel removed during excavations (from upgrades, spill response, or remediation) are tested and disposed of appropriately. The soil and gravel are either transported directly from the distribution network to the disposal facility or are transported to Wilsonville (only soil/gravel with < 50 ppm PCBs) and/or PSC for interim storage before bulk disposal at a location dependant upon PCB-content. See response and document (Q21a_Waste Stream Summary.pdf) attached for Question 21. Some of the water and solids removed from vaults may have contained PCBs due to equipment malfunctions. Between approximately 1995/1996 and 2002, vault water was filtered before being discharged to the City of Portland sanitary sewer at PSC. This process is described in response to Question 18 of the separate 104(e) response for Harborton. Since 2002, vault water that appears to contain oil is handled by PGE's spill response crew according to the spill response procedures described in response to Question 21. Handling of the removed underground vault materials is generally described by the document (Q21a_Vault Water Disposal Flow Chart.pdf) attached in response to Question 21a and disposal of these materials is more specifically described by the document (Q29_Operations-Waste Schematic.pdf) attached in response to Question 29. Details regarding the transport and disposal are provided in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. Water recovered by the spill response crew is generally transported to Wilsonville Line Center and discharged to a dewatering box. Accumulated water and solids are periodically collected from the dewatering box, tested, and appropriately disposed of. For further details, see the response to Question 21.	Also see Question 29 Attachment Q29_Operations-Waste Schematic.pdf Also see all Question 62 Attachments
a. a May 20, 1988 release of 20 gallons of 400 parts per million PCB transformer oil;	Not applicable. Questions 69a through 69e are not relevant to this response. Information regarding these releases is provided in the 104(e) response for Harborton.	
b. a February 9, 1995 release of 5 gallons of oil that spilled from a bushing on the ground;		
c. a February 24, 1997 release of 20 gallons of 19 parts per million PCB transformer oil onto the ground, and;		
d. a July 25, 1997 release of 3 gallons of less than 5 parts per million PCB oil from a break on the ground, and;		

EPA Question	Response	Records/Information Available
e. a December 4, 1997 release of 40 gallons of cable oil onto the ground following vandalism at the Harborton substation.		
Section 7.0 - Property Investigations 70. Provide information and documentation concerning all inspections, evaluations, safety audits, correspondence and any other documents associated with the conditions, practices, and/or procedures at the Property concerning insurance issues or insurance coverage matters.	To the best of PGE's knowledge, after reasonable inquiry, no insurance or coverage-related health and safety inspections, evaluations, audits, or correspondence were prepared for the distribution network or submerged cables addressed in this response. Copies of PGE's relevant general liability insurance policies are provided in a supplemental submittal (Supplemental Submittal S4).	
71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property. Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.	Distribution Network: To the best of PGE's knowledge, after reasonable inquiry, soil characterization associated with the distribution network was performed to assess the geotechnical suitability of pole locations within the distribution network and for a sewer installation. These investigations are described in the response and documents (Q15_1983 ODOT Geology Report - Yeon Ave.pdf, Q15_2002 GeoEngineers Nicolai St Geotech Report.pdf, Q15_2002 GeoEngineers Thurman St Geotech Data.pdf, and Q15_2002 GeoEngineers Thurman St Geotech Rpt.pdf) attached for Question 15. Soil and gravel removed during spill response are tested and disposed of appropriately. The soil and gravel are either transported directly from the distribution network to the disposal facility or are transported to Wilsonville (only soil/gravel with < 50 ppm PCBs) and/or PSC for interim storage before bulk disposal at a location dependant upon PCB-content. Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents summarize information including the date, location, equipment, spill volume, and clean up actions at each spill. For further details, see the response to Question 15, the response and documents attached for Question 21, and response and documents attached for Question 62. Submerged Cables: To the best of PGE's knowledge, after reasonable inquiry, there are no investigations of soil, water, air quality, or geology/hydrogeology associated with the submerged cables.	See Question 15 Attachments Q15_1983 ODOT Geology Report - Yeon Ave.pdf Q15_2002 GeoEngineers Nicolai St Geotech Report.pdf Q15_2002 GeoEngineers Thurman St Geotech Data.pdf Q15_2002 GeoEngineers Thurman St Geotech Rpt.pdf Also see all Question 62 Attachments

EPA Question	Response	Records/Information Available
a. a May 20, 1988 release of 20 gallons of 400 parts per million PCB transformer oil; b. a February 9, 1995 release of 5 gallons of oil that spilled from a bushing on the ground; c. a February 24, 1997 release of 20 gallons of 19 parts per million PCB transformer oil onto the ground, and; d. a July 25, 1997 release of 3 gallons of less than 5 parts per million PCB oil from a break on the ground, and; e. a December 4, 1997 release of 40 gallons of cable oil onto the ground following vandalism at the Harborton substation.	Not applicable. Questions 71a through 71e are not relevant to this response. Information regarding these releases is provided in the 104(e) response for Harborton.	
72. Describe any remediation or response actions you or your agents or consultants have ever taken on each Property either voluntarily or as required by any state or federal agency. If not otherwise already provided under this Information Request, provide copies of all investigations, risk assessments or risk: evaluations, feasibility studies, alternatives analysis, implementation plans, decision documents, monitoring plans, maintenance plans, completion reports, or other document concerning remediation or response actions taken on each Property.	Releases after 1979 within the Investigation Area which were not associated with properties addressed in separate 104(e) responses are compiled and summarized in the documents (Q62_Miscellaneous Spill Table.pdf and Q62_Spills & Damaged Equip.pdf) attached in response to Question 62. To the best of PGE's knowledge, after reasonable inquiry, these documents summarize information including the date, location, equipment, spill volume, and remedial actions at each spill. For further details on spills and releases, see the response and documents attached for Question 62.	See all Question 62 Attachments
73. Are you or your consultants planning to perform any investigations of the soil,	No future investigations of the distribution network or submerged cables are planned. On an as needed basis, soil confirmation sampling may be conducted in the future after cleanup of spill events and general operational activities (e.g., removal, updates, maintenance).	

EPA Question	Response	Records/Information Available
water (ground or surface), geology, and hydrology or air quality on or about the Property? If so, identify:		
a. what the nature and scope of these investigations will be;		
b. the contractors or other persons that will undertake these investigations;		
c. the purpose of the investigations;		
d. the dates when such investigations will take place and be completed; and		
e. where on the Property such investigations will take place.		
Section 8.0 - Corporate Information		
74. Provide the following information, when applicable, about you and/or your business(es) that are associated with each Property identified in response to Question 4:	Responses and documents for Section 8.0 – Corporate Information for all PGE sites are provided in a supplemental submittal (Supplemental Submittal S1).	
a. state the current legal ownership structure (e.g.. corporation, sole proprietorship);		
b. state the names and current addresses of all current and past owners of the business entity or, if a corporation, current and past officers and directors;		
c. discuss all changes in the business' legal ownership structure, including any corporate successorship, since the inception of the business entity. For example, a business that starts as a sole proprietorship, but then incorporates after a few years, or a		

EPA Question	Response	Records/Information Available
business that is subsequently acquired by and merged into a successor. Please include the dates and the names of all parties involved;		
d. the names and addresses of all current or past business entities or subsidiaries in which you or your business has or had an interest that have had any operational or ownership connection with the Properties identified in response to Question 4. Briefly describe the business activities of each such identified business entities or subsidiaries; and		
e. if your- business formerly owned or operated a Property identified in response to Question 4, describe any arrangements made with successor owners or operators regarding liability for environmental contamination or property damage.		
75. List all names under which your company or business has ever operated and has ever been incorporated. For each name, provide the following information:		
a. whether the company or business continues to exist, indicating the date and means by which it ceased operations (e.g., dissolution, bankruptcy, sale) if it is no longer in business;		
b. names, addresses, and telephone numbers of all registered agents, officers and operations management personnel; and		

EPA Question	Response	Records/Information Available
c. names, addresses, and telephone numbers of all subsidiaries, unincorporated divisions or operating units, affiliates, and parent corporations if any, of the Respondent.		
d. all information requested in (a) through (c) above regarding, but not limited to, the following entities and including their relationship to Respondent (e.g. whether these entities are business partners, separate entities, subsidiaries, and/or aliases etc. of Respondent):		
i. V & K Service, Inc.; and		
ii. Jinkz Corp.		
76. Provide all copies of the Respondent's authority to do business in Oregon. Include all authorizations, withdrawals, suspensions and reinstatements.		
77. If Respondent is, or was at any time, a subsidiary of, otherwise owned or controlled by, or otherwise affiliated with another corporation or entity, then describe the full nature of each such corporate relationship, including but not limited to:		
a. a general statement of the nature of relationship, indicating whether or not the affiliated entity had, or exercised, any degree of control over the daily operations or decision-making of the Respondent's business operations at the Site;		

EPA Question	Response	Records/Information Available
b. the dates such relationship existed;		
c. the percentage of ownership of Respondent that is held by such other entity(ies);		
d. for each such affiliated entity provide the names and complete addresses of its parent, subsidiary, and otherwise affiliated entities, as well as the names and addresses of each such affiliated entity's officers, directors, partners, trustees, beneficiaries, and/or shareholders owning more than five percent of that affiliated entity's stock;		
e. provide any and all insurance policies for such affiliated entity(ies) which may possibly cover the liabilities of the Respondent at each Property; and		
f. provide any and all corporate financial information of such affiliated entities, including but not limited to total revenue or total sales, net income, depreciation, total assets and total current assets, total liabilities and total current liabilities, net working capital (or net current assets), and net worth.		
g. all information requested in (a) through (f) above regarding, if applicable, but also explain any corporate or financial relationship Respondent may have had or has with the Enron Corporation.		
78. If Respondent is a partnership, please describe the partnership and provide a history of the partnership's		

EPA Question	Response	Records/Information Available
existence. Provide a list of all current and past partners of any status (e.g., general, limited, etc.) and provide copies of all documents that created, govern, and otherwise rules the partnership, including any amendments or modifications to any of the originals of such documents, and at least five years of partnership meeting minutes.		
Section 9.0 - Compliance With This Request 79. Describe all sources reviewed or consulted in responding to this request, including, but not limited to:		
a. the name and current job title of all individuals consulted;	David Lamb, Western Division Manager Scott Mara, Distribution Engineer Al Beck, T&D Supervisor Jennifer Galaway, T&D Planning Engineer Derrick Harris, T&D Planning Engineer Rob Jones, T&D Planning Engineer Deven Leigh, T&D Planning Engineer Darren Murtaugh, T&D Planning Engineer John Uwagbae, T&D Planning Engineer Rob Weik, T&D Planning Engineer Nancy Worlein, T&D Specialist Dave VanBossuyt; Distribution Administration Manager Mark Cooksey, IT Client Services Manager Laura Holgate, Power Supply Eng Services Supervisor Jeddy Beasley, Transportation Services Manager Jayne Allen, Environmental Services Specialist Arya Behbehani-Divers, Environmental Services Manager Brandy Horn, Environmental Services Specialist Mike Livingston, Property Services Manager Tim Calhoun, Network Communications Supervisor – retired Mike Schwartz, Power Supply Eng Services General Manager Rand Sherwood, Utility Services Manager Tom Stodd, Environmental Services Specialist Bob Lazrine, Special Tester Forman Sid Hiller, Manager Kristina Rodgers, Assistant	Question 79 Attachment Q79_PdxHarbor Contact Information Rev.pdf

EPA Question	Response	Records/Information Available
	Debby Klinger, Specialist Chuck McCartney, Specialist Alma McGloghlon, Analyst Larry Morgan, Supervisor Gwen Williams, Manager In addition, the attached document contains additional sources consulted for responses to selected questions.	
b. the location where all sources reviewed are currently reside; and	PGE's Office at: 121 SW Salmon, 1WTC1302, Portland, Oregon 97204. Records are contained in the Facilities Management Departments, the Human Resources Department, and in the Corporate Records Information System (CRIS) database. In addition, the Hawthorne Retiree Museum contains the following: • The History of Portland General Electric Company, 1889 - 1981 • Electrifying Eden by Craig Wollner The History of Portland General Electric Company, 1989 - 1981 is attached in response to Question 77, which is part of the Supplemental Submittal S1. A hardcopy of Electrifying Eden was provided in a separate submittal.	
c. the date consulted.	Work on this information request was performed from February 2008 through August 2009.	
80. If not already provided, identify and provide a last known address or phone number for all persons, including Respondent's current and former employees or agents, other than attorneys, who have knowledge or information about the generation, use, purchase, storage, disposal, placement, or other handling of hazardous materials at, or transportation of hazardous substances, waste, or materials to or from each Property identified in response to Question 4.	See the responses and documents for Questions 2, 6g, 15, 21, 38, 39, 40, and 79.	See all Question 6 Attachments Also see all Question 15 Attachments Also see all Question 21 Attachments Also see all Question 38 Attachments Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.doc Also see Question 79 Attachments Q79_PdxHarbor Contact Information Rev.pdf
81. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. If the	PGE Records Management Services (RMS) provides a uniform records management program for the company. The program includes the Corporate Records Information System (CRIS) an online application used by departments to identify, index, and manage their records. RMS also provides records storage and retrieval and document imaging services.	

EPA Question	Response	Records/Information Available
records were destroyed, provide us with the following;	RMS can investigate why records are no longer available if we know which records are being sought. Knowing the date, originator, and subject of the records in question are essential to determining their availability or their ultimate disposition. Each unique record category is identified in CRIS and assigned a file pattern code (file category). Information about each file category includes the office of record (originator), and retention requirements and regulatory citations – who requires the record to be kept and for how long. The PGE records program and records retention schedule comply with the recordkeeping requirements of the Oregon Public Utility Commission (PUC) and Federal Energy Regulatory Commission (FERC). State and federal guidelines require us to identify which records PGE produces, and how and for how long those records will be retained. PGE Policy requires that records should not be destroyed before, or kept after, meeting retention requirements. Consequently, PGE regularly destroys records in the normal course of business and when legally required to do so. Such destructions are approved by the PGE Records Retention Committee and authenticated and recorded by RMS. How long a particular type of record is retained is based on operating needs, legal, and regulatory requirements and, in a few cases, historical or archival value.	
a. the document retention policy between 1937 and the present;	RMS was created in 1977 and we can provide PGE's records management guidelines from 1977 to the present. Prior to that time, records management was the responsibility of each functional area, plant or division office. Accounting records were kept in compliance with 18 CFR Part 125, Regulations to Govern the Preservation of Records of Public Utilities and Licensees (1972), issued by the Federal Power Commission (now FERC) and NARUC, the National Association of Regulatory Utility Commissioners.	
b. the approximate date of destruction;	See the response to Question 81a, above. Since it was established (c. 1977) RMS has maintained a hardcopy or microfilm record of boxes of records destroyed in the normal course of business, if those records were turned over to RMS custodianship. To know *when* a record was destroyed, it is necessary to know the record category, the approximate date of creation, and which department created it. It should be noted that the level of detail of information about the records destroyed is the same as that used to identify the records when they were sent to storage.	
c. a description of the type of information that would have been contained in the documents;	See the response to Question 81b, above. RMS can help discern what records were typically filed in a particular file category. If similar records from that era exist they may show what information was captured by the documents. For example, a typical "job" form from 1980 would include much the same information listed on a similar job form from 1940, i.e., the work location, equipment used, labor hours, parts, drawings, etc.	
d. the name, job title and most current address known by you of the person(s) who would have produced these documents; the person(s) who would have been responsible for the	RMS is responsible for all records sent to the records center from 1977 to present, including ultimate disposition of those records. Records of documents destroyed include the names of the originator, authorizations for destruction (signatures) and the name of the person who physically destroyed or recycled the documents. Individual Responsibility Center (RC) managers are and would have been responsible for maintaining and disposing all other records, i.e., those that were not sent to the archives.	

EPA Question	Response	Records/Information Available
retention of these documents; the person(s) who would have been responsible for destroying the documents; and the person(s) who had and/or still have the originals or copies of these documents; and		
e. the names and most current addresses of any person(s) who may possess documents relevant to this inquiry.	RMS can provide printed reports from the CRIS of existing records related to the request (that have been entered into CRIS by the originating RC). CRIS shows the names of all departments using the system for managing their records, what categories of records are maintained and where the records are filed (in the department or the records storage center). On request, RMS can provide a list of all RCs that use the CRIS system. This report would show each RC's file plan by document type (or subject) and the types of documents that should be filed under those headings. Multiple key word searches were performed in PGE's CRIS system. No date restrictions were placed on the searches. The results from each key word search were printed from the CRIS system with either a list of record titles or a "There are no entities to display" message. The "There are no entities to display" message means that based on the search query no records were found. Individual CRIS printouts are available upon request but provide no additional information.	
82. Provide a description of all records available to you that relate to all of the questions in this request, but which have not been included in your responses.	Documents not included in this request are: • Documents describing other PGE sites • PGE internal emails, correspondences, documents not specifically relevant to these questions • Documents determined to be Attorney-Client privileged, which are identified on the comprehensive privilege log that will be submitted with the final set of responses. • Duplicate documents/figures • Easements, right-of-way agreements, or permits for distribution network equipment (e.g., power poles, lines, transformers, etc.) • Distribution Services Department contracts and invoices for leased and customer-owned maintenance jobs. • Correspondence regarding settlement negotiations for the submerged cable severed by a barge in 1988.	